CARON EV 309

# Technical Report Series

A Review of
Benthic Invertebrate
Surveys in
Peninsula Harbour
and Adjacent Nearshore
Waters
of Lake Superior,
1969 - 1989

Technical Report #10 Peninsula Harbour



NORTH SHORE
OF LAKE SUPERIOR
REMEDIAL ACTION PLANS

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## Remedial Action Plan Plan d'Assainissement

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#### Peninsula Harbour

September, 1991

To Whom it may Concern:

The following report summarizes trends in benthic community density and diversity in Peninsula Harbour and adjacent nearshore waters in Lake superior, during the period from 1969 to 1989.

This report notes that benthos diversity and density at sample stations greater than 20 meters in depth were typical of Lake Superior. However, a lack of taxa in the Insecta groups other than Chironomidae, in nearshore areas of less than 20 meters of water, indicated that most of Peninsula Harbour is somewhat degraded. Similarly, the abundance of the pollution tolerant tubificids Limnodrillus spp. and <u>Tubificid tubifex</u> in Jellicoe Cove and other portions of Peninsula Harbour in some sample years, is indicative of fairly severe water and/or sediment quality degradation. Only subtle changes in benthic community, attributable to changes in mill effluent quality, were detected.

There was a shortfall in the number and variety of macroinvertebrates in the nearshore areas of Lake Superior, especially near the mill diffuser. Diversity and density rapidly increased to typical Lake Superior values with increasing distance from the effluent outfall.

This report is one of a series of technical reports on the aquatic ecosystem in northern Lake Superior. This series is being prepared in support of the Remedial Action Plan Program which was initiated by the International Joint Commission in 1986.

Yours Truly,

Patricia Inch Coordinator

Peninsula Harbour Remedial Action Plan

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A REVIEW OF
BENTHIC INVERTEBRATE
SURVEYS IN
PENINSULA HARBOUR
AND ADJACENT NEARSHORE
WATERS
OF LAKE SUPERIOR,
1969 - 1989

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#### ABSTRACT

A total of 462 samples of benthic macroinvertebrates were collected from the nearshore zone of Lake Superior near Marathon, Ontario, during four surveys in 1969, 1976, 1977-78 and 1989. These contained a total of 85 invertebrate taxa, of which only 7 were common or abundant: Pontoporeia hoyi, Stylodrilus heringianus, Limnodrilus hoffmeisteri, Tubifex tubifex, Pisidium spp., Polypedilum spp. and Procladius spp. Abundance and composition of the fauna at deep water stations (>20m) was typical of similar areas elsewhere in the Great Lakes. No distinct area of impact on the benthic fauna was detected adjacent to the discharge from the James River-Marathon pulp mill, nor was there evidence of changes in bethic community structure over the 20 years which could be attributed to changes in mill operations or treatment of effluents. The only exception was a decrease in the abundance of Tubificidae which may reflect a lessening of inputs of organic matter to Jellicoe Cove between 1969 and 1976. Detailed analyses of the results of these benthic surveys were hampered by the lack of replicate samples, changes in the sampling grid between surveys, and the lack of samples from appropriate control areas. The most striking result of the surveys was the virtual absence of Ephemeroptera, Trichoptera and Plecoptera suggesting that shallow portions (<10m) of the entire study area are degraded to some degree.

## 1.0 INTRODUCTION AND OBJECTIVES

During the late 1960's the Ontario Ministry of the Environment (MOE: known at that time as the Ontario Water Resources Commission) established a monitoring program of benthic communities and water quality in areas receiving effluent from pulp and paper mills. Among those targeted for assessment were several mills located on the north shore of Lake Superior. Each of these areas have since been identified by the Great Lakes Water Quality Board (GLWQB) of the International Joint Commission (IJC) as "areas of concern" with regard to water pollution problems (Farara et al. 1988).

The first published report under this program dealt with Nipigon Bay (Domtar Newsprint at Red Rock) (Kelso et al. 1977). As part of that study, Vander Wal (1977) found that populations of sensitive invertebrates, such as the amphipod Pontoporeia hoyi, were either eliminated or reduced to very low densities near the pulp mill. In contrast, pollution tolerant organisms, most notably the oligochaetes Tubifex tubifex and Limnodrilus hoffmeisteri, maintained high densities in these same areas. More recently, Farara et al. (1988), studied the impact of bleached kraft mill effluent (BKME) on the benthic community of Jackfish Bay which receives effluent from the Kimberly Clark pulp mill at Terrace Bay, Ontario. These authors found that an area of approximately 0.4 km around the outfall was completely devoid of benthos. A further zone of five square kilometres was characterized by high densities of T. tubifex and L. hoffmeisteri. The amphipod P. hoyi has declined in abundance since the initial survey (1969) and has been virtually eliminated from Jackfish Bay. The most important finding by Farara et al. is that there has been an increase in the concentration of nutrients (eutrophication) in Jackfish Bay, rather than an improvement in habitat, despite the incorporation of several pollution abatement measures by the pulp mill. The nutrient enrichment of Jackfish Bay has coincided with the decline of P. hoyi populations.

Benthic community and water quality surveys were initiated at Peninsula Harbour in 1966. Historical impacts of the pulp mill on water and sediment quality have previously been reported (Ontario Ministry of the Environment 1972, Anonymous 1978; Anonymous 1983; Jardine and Simpson 1990). The impact of the mill effluent on the benthic community of Peninsula Harbour and nearshore waters of Lake Superior has been assessed on a preliminary basis (Ontario Ministry of the Environment 1972; Anonymous 1978), but an extensive investigation has not been completed. In this regard, the primary objectives of the current study are:

- i) to identify the benthic invertebrates in 462 samples taken from Peninsula Harbour and the nearshore area of Lake Superior;
- ii) to evaluate community structure through determination of total abundance, number of taxa, diversity, and evenness of each sample from each year; and
- to assess temporal changes in benthic community structure between 1969 and 1989 in relation to physical parameters such as depth and substrate and to the incorporation of pollution abatement measures in both the pulp mill and water pollution control plant.

## 1.1 Study Area

The surveys were conducted at Peninsula Harbour and nearshore waters of Lake Superior near Marathon, Ontario, approximately 290 km east of Thunder Bay, Ontario (Figure 1). The harbour itself is relatively sheltered from the open waters of Lake Superior by Ypres Point to the north, The Peninsula to the south, and Hawkins and Blondin Islands within the harbour. The town of Marathon extends from Jellicoe Cove, around the neck of The Peninsula to Pebble Beach, Lake Superior. The pulp mill, currently owned and operated by James River-Marathon Limited, is located on the northwest side of The Peninsula in Jellicoe Cove. To the south of Peninsula Harbour lies a long stretch of open shoreline, extending from The Peninsula to Randle Point. The shoreline in this area is characterized by large cobbles, gravel and Precambrian bedrock.

## 1.2 Mill Background and Operation

The mill began operation in the mid-1940's using the Kraft (sulphate) method of pulping and a chlorine bleaching stage (Jardine and Simpson 1990). Mill capacity is approximately 160,000 short tons of pulp annually, produced in an approximate ratio of 35,000 tons bleached hardwood, 115,000 bleached softwood, and 10,000 tons of unbleached softwood (Bonsor et al. 1988; Jardine and Simpson 1990). Prior to 1977, a chlor-alkali plant operated adjacent to the pulp mill and discharged effluent into Peninsula Harbour. High levels of metals, most notably mercury, currently persist in the sediments of Jellicoe Cove and Peninsula Harbour and these have consistently exceeded provincial open water disposal guidelines for dredged spoils (Jardine and Simpson 1990). Polychlorinated biphenyl (PCB) concentrations in the sediments of these areas are also of concern.

Prior to 1980, effluents from the pulp mill operation were discharged to five different locations (MOE 1972; Jardine and Simpson 1990). During this time, over 80% of the mill effluent, including that from the main mill sewer and the bleachery filtrate, was pumped over the neck of The Peninsula (between The Peninsula and the townsite) to Pebble Beach, Lake Superior (see E, Figure 1). The remainder was discharged from various sewers into Jellicoe Cove (MOE 1972). Effluent discharged into Lake

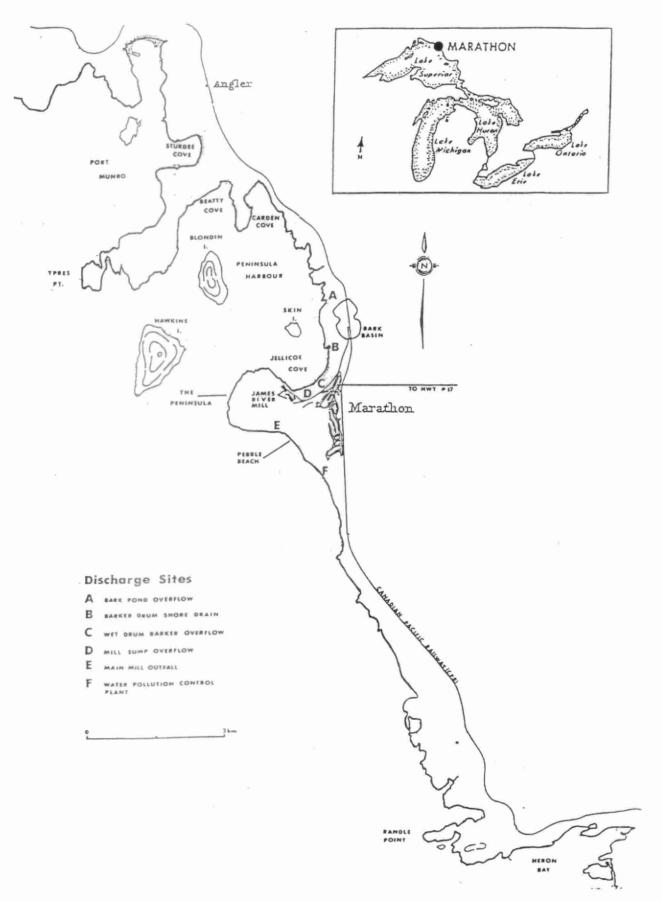


Figure 1. Major geographical locations and outfall sites of Peninsula Harbour and Lake Superior.

Superior produced a visible plume of varying size, but which frequently extended up to 1.5 km from the outfall. The movement of the plume was determined largely by surface currents produced by wind, and occasionally extended around The Peninsula into Jellicoe Cove. Since 1980, all mill effluent has been directed to Lake Superior via The Peninsula (Jardine and Simpson 1990). Discharge of effluent to Peninsula Harbour is thus now restricted to periodic overflow from the main mill sump (point E, Figure 1) (Jardine and Simpson 1990). The town of Marathon's sewage treatment plant discharges secondarily treated effluent to Pebble Beach (via a diffuser), approximately 1300 m from the mill outfall (point F, Figure 1).

Until 1983, Peninsula Harbour served as a full-time repository for pulp logs (Jardine and Simpson 1990) with the primary storage area on the east side of Jellicoe Cove. Beatty Cove and Port Munro have also been used for log storage. Since 1983, however, the company has obtained wood chips (as raw material) from local sawmills for use in the mill. Logbooming activities within the harbour after 1983 were restricted to periodic rafts of sawlogs for transport to Thunder Bay. However, this practice ceased in 1988.

Since the purchase of the mill by James River-Marathon Ltd. in 1983, a number of remedial measures have been implemented in an effort to reduce the impact of the effluent on the aquatic environment of Peninsula Harbour and Lake Superior. A mechanical clarifier was added in 1972 (by the previous owners, American Can Ltd.) to remove the bulk of the suspended solids from the effluent (MOE, 1972). In September 1984, a ten-port, submerged diffuser was put into service to eliminate the aesthetic impact of the brown foam associated with the plume and provide a greater dilution of the effluent (Jardine and Simpson 1990).

In-plant changes have included replacement of the digesters, addition of scrubbers and filters in the lime kiln, scrubbers on the tall oil reactor, and the elimination of effluent from the debarking/slashing operations (Jardine and Simpson 1990).

#### 1.3 Substrate Characteristics

The field notes from each survey included qualitative descriptions of the sediments at each station. We compared these descriptions with the more detailed analysis reported by Jardine and Simpson (1990) and found good agreement among surveys as to the type of substrate in various regions (Figure 2). In general, offshore (depths >30m) regions had silt substrata and the most exposed inshore areas were rock and gravel. The distribution of sand and mud also reflected exposure to currents and wave action, with mud in very sheltered bays or behind sills. Bark and finer detritus were found throughout Peninsula Harbour, but especially in Jellicoe Cove and Beatty Cove.

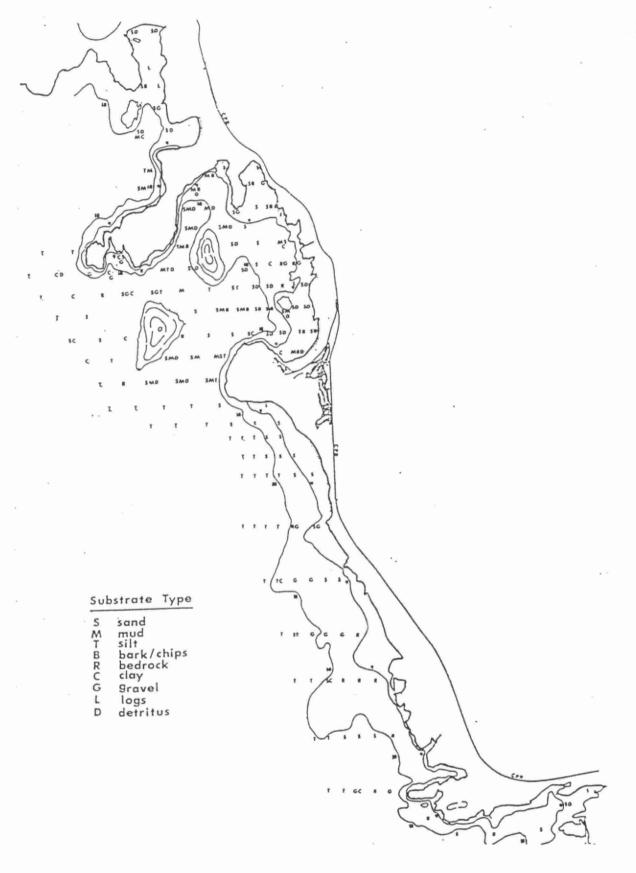


Figure 2. Substrate characteristics for Peninsula Harbour. Lines represent the 9 and 18 metre depth contours (classification based on field survey of 1989).

### 2.0 METHODS

## 2.1 1969/1976 Surveys

Sampling in 1969 and 1976 was conducted along a series of transects radiating out from known point sources (Figure 3). One Ponar grab sample (0.05 m<sup>2</sup>) was collected from each of 109 stations in July 1969. A smaller survey of 61 of these stations was carried out in August 1976. The contents of each grab were washed through a U.S. standard #24 mesh (0.56 mm apertures) and the residue retained on the screen was stored in 95% ethanol. Invertebrates were later sorted from the samples with the aid of a dissection microscope, then stored in 70% ethanol.

## 2.2 1977/1978/1989 Surveys

The transect pattern used in 1969 and 1976 was abandoned in the 1977/78 and 1989 surveys in favour of a grid pattern. The position of each station was determined through a combination of sounding depths and dead reckoning with islands, landforms, and other prominent features. Fifty-seven stations were sampled in June 1977, but that survey was not completed due to logistic problems. Another 19 stations were sampled in May/June 1978, to complete the "1977" survey. All stations were within Peninsula Harbour (Figure 4). The latest survey of 182 stations, conducted in July 1989, included a series of previously unsampled stations to the north of Ypres Point (Figure 5). The same procedures for the collection and processing of samples were used during all surveys. The only exception was that 5 replicate samples were collected at 7 stations in 1989. Unfortunately, the animals from each of the replicates were placed in the same vial, so no estimate of sample variability could be made.

## 2.3 Identification of Animals

Invertebrates from the 462 samples collected during all surveys of the study area were identified to the lowest practical taxonomic level. Chironomid larvae were mounted on slides and identified according to Wiederholm (1983), Saether (1975, 1977) and Oliver and Roussel (1982,1983). Other insects were identified following Merritt and Cummins (1984). All, or a randomly chosen subsample of 50, of the oligochaetes

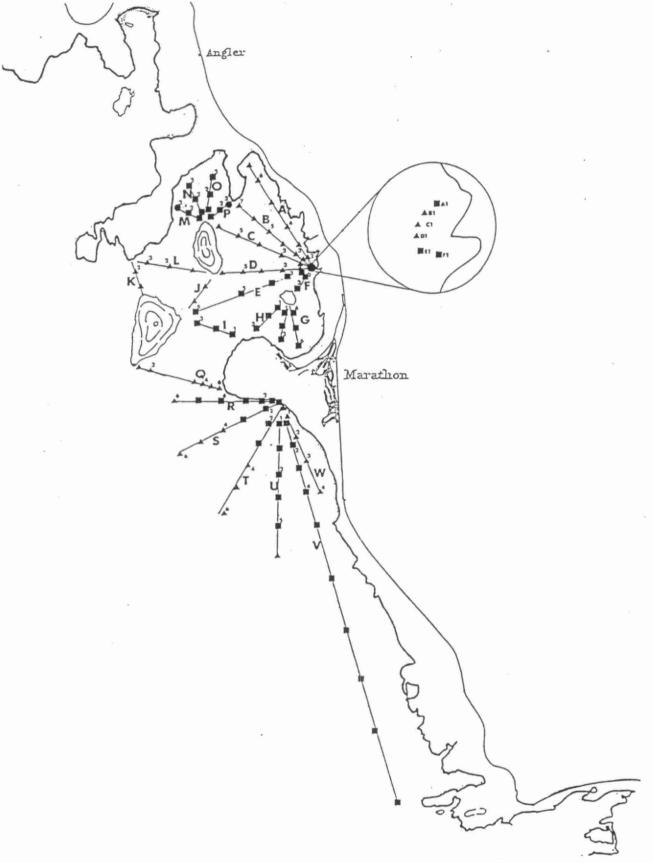


Figure 3. Sampling sites for benthic surveys of 1969 and 1976 (▲ = sampled in 1969 only, ■ = sampled in 1969 and 1976, ● = sampled in 1976 only; superscript numbers represent sample or station numbers).



Figure 4. Sampling sites for benthic surveys of 1977/1978 (▲ = sampled in 1977 only, ■ = sampled in 1978 only).

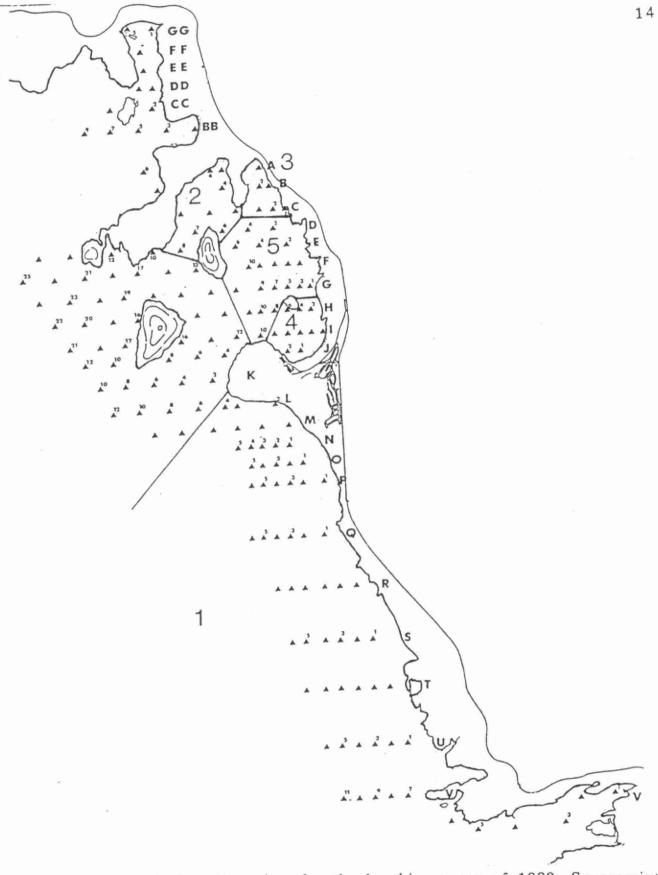


Figure 5. Sampling sites for the benthic survey of 1989. Superscript numbers indicate station numbers; larger numbers 1-5 indicate zones defined in the text on page 17.

from each sample were mounted in polyvinylactophenol and identified following Brinkhurst (1984). Immature Tubificidae which could not be identified on the basis of somatic characters were assigned to species according to the proportions of mature individuals in each sample. Amphipoda, Isopoda, Hirudinea and Turbellaria were identified using keys by Holsinger (1972), Williams (1972) and Pennak (1989), respectively. Hydracarina were not identified beyond the level of order.

## 2.4 Summary Statistics and Data anlaysis

The following summary statistics were calculated for each sample: total number of animals, number of taxa, Shannon-Wiener diversity [H=- $\sum p_i(\log_2 p_i)$ ] (Shannon 1949), evenness [E = H/log<sub>2</sub>( $p_i$ )] (Pielou 1966) and Trophic Index (I) (Milbrink 1983). Values of I were calculated as:

$$I = \frac{\frac{1}{2\sum_{n_1} + \sum_{n_2} + 2\sum_{n_3} + 3\sum_{n_4}}{\sum_{n_1} + \sum_{n_2} + \sum_{n_3} + \sum_{n_4}}$$

where n<sub>1</sub>, n<sub>2</sub>, n<sub>3</sub> and n<sub>4</sub> represent the number of individuals in the sample belonging to each of four ecological groups based on Lauritsen et al. (1985): group 1 (oligotrophic) includes Stylodrilus heringianus, Limnodrilus profundicola, Tubifex superiorensis, T. kessleri and Rhyacodrilus spp.; group 2 (mesotrophic) includes Aulodrilus americanus, A. pluriseta, Ilyodrilus templetoni, Potamothrix vejdovskyi and Spirosperma ferox; group 3 (saprophilic) includes Limnodrilus hoffmeisteri, L. angustipennis and L. udekemianus: and group 4 (saprobiontic) includes Tubifex tubifex and Limnodrilus claparedeanus. This index can take values between 0 (oligotrophic) to 3 (grossly polluted).

Identification of areas of impact and comparisons of the surveys conducted during different years were hindered by the lack of replication of samples from individual stations, the differing numbers and locations of stations sampled each year and the lack of appropriate control stations well-removed from any potential impact of mill activities. The inherent

variability among benthic samples is well known (e.g. Elliott 1977, Green 1979), so little confidence can be placed in the representativeness of individual grab samples. This means that even when stations were located in the same place in subsequent surveys, several-fold differences in the abundance of animals or number of taxa might not indicate any real change. Similarly, apparent changes over time might reflect other factors such as annual variability due to weather conditions or changes in predation from fish populations; such effects might be detectable through examination of samples from control areas.

With these constraints in mind, we examined the raw data to see if: 1) there had been significant changes in the benthic community over the whole of the study area between 1969 and 1989, the years of the most extensive surveys, and 2) samples from physically similar areas (i.e. spatially contiguous, and with similar substrata and depths) could be pooled and treated as replicates so that data from all surveys could be compared. Ideally, one would compare individual stations between cruises, but without replicate samples this is impossible. Total abundance, number of taxa per sample, H' and E were examined using three-way analysis of variance (ANOVA) followed by Tukey's HSD test (both with p<0.05), with the null hypothesis that there was no difference between years (1969 vs. 1989), depths (in 10 m intervals) or types of substratum. The sediments described in the field notes for each cruise were assigned to one of three categories: "coarse" included bedrock, boulders, pebbles and hard clay; "medium" included muddy gravel, gravelly sand and sand; and "fine" included muddy sand, sandy mud and silt. Fewer than 15% of the stations in any year had "coarse" substrata, so these were dropped from the analyses. Barton (1988) found that benthic invertebrates in Lake Erie exhibited significant biological responses to these substrate categories and that further partitioning (e.g. into sandy mud, gravelly sand, etc.) does not result in additional information. Sample values for numbers of taxa and individuals were transformed (log n+1) to eliminate the dependence of variance on mean (Elliott 1977). These analyses were done using SYSTAT, Version 4.2 (1990).

The results of these ANOVA's were examined more closely by plotting counts of animals and taxa against two important physical variables, depth of water and type of substratum, and against depth on

each type of substratum. Neither total abundance nor number of taxa varied in any systematic way with depth, except that samples from gravel along the open shore of Lake Superior contained more animals of more kinds in deeper water. In general, the finest sediments (mud and silt) yielded larger numbers of individuals and taxa than did those from sand and gravel (in declining order) but the variability was so great that sample counts of individuals and taxa were only weakly correlated ( $r^2 = 0.28$ ).

On the basis of these analyses, we divided the study area into 5 zones (Figure 5) which were more or less distinct with respect to both location and type of substratum and included at least 4 stations in each survey year: 1) the open lake south of The Peninsula where the substratum was gravel or sand inshore and mud offshore, 2) Beatty Cove where the bottom was mostly mud and the average depth sampled was about 18 m, 3) shallow (5 - 6 m), sandy Carden Cove, 4) Jellicoe Cove where most stations were about 12 -14 m deep and substrates were generally sandy, and 5) the rest of Peninsula Harbour where depths and substrates were more variable but covered similar ranges in each year. Table 1 summarizes the sampling effort during each survey for zones 2-5. The open lakeshore (Zone 1) was sampled extensively only in 1969 and 1989; we examined stations near the outfalls and further south in detail (1989 transects L, M, N, R and S, and the 1969 equivalants).

Counts of taxa and animals (both sample totals and individual species or taxonomic groups), as well as values of H, E and I, were compared within each zone among all survey years. The variability of all counts precluded statistically significant differences among years, so we looked for trends over time which might be consistent with known changes in operations or treatment of effluents from the mill.

Table 1. Numbers of samples collected from different substrata and depth ranges from areas of Peninsula Harbour during each benthic survey.

	Su	bstrati	ım		Dep	oth(m)	
Survey	Gravel	Sand	Mud	<10	11-20	21-30	>30
			BE	ATTY COVE			
1969	0	2	9	1	6	4	0
1976	0	6	6	1	6	5	0
1977/78	0	7	8	4	3	6	2
1989	0	2	8	3	2	3	2
			C	ARDEN COV	5		
1969	0	4	0	4	0	0	0
1976	0	0	0	0	0	0	0
1977/78	2	8	0	10	0	0	0
1989	2	4	0	6	0	0	0
			TE	ELLICOE COV	TE .		
	0		8	4	4	1	0
1969	0	1	0	2	5	2	0
1976	0	9	3	4	3	2	4
1977/78	2	8 7	2	6	4	0	0
1989	1	/	2	0	4	O	O
			PENIN	SULA HARI	BOUR		
1969	5	20	4	17	9	2	1
1976	0	10	0	6	2	1	1
1977/78	5	19	9	6	12	3	12
1989	6	13	2	7	7	4	3

#### 3.0 RESULTS

A total of 85 taxa was identified from the 462 benthic samples (Table 2), most of which were rarely collected: 60 taxa occurred in <10% of the samples in any year. Only 5 taxa were found in >25% of the all samples from all surveys: Pontoporeia hoyi, Stylodrilus heringianus, Polypedilum spp., Pisidium spp. and Procladius spp. The family Tubificidae (Oligochaeta) was also represented in most samples, often abundantly. Aulodrilus spp., Potamothrix vejdovskyi, Rhyacodrilus spp. and Spirosperma ferox can be recognized at any stage of maturity. All other immature Tubificidae without hair setae were assumed to be Limnodrilus spp. (mainly L. hoffmeisteri), and those with hair setae were mainly Tubifex tubifex, as judged from the sexually mature specimens examined. Insects other than Chironomidae were extremely rare, generally represented by only single individuals. Detailed listings of the abundance of each species in samples from each survey are provided in Appendix A.

Numbers of taxa in individual samples ranged from 0 to 16; most samples contained fewer than 8 taxa. Mean values for No. of taxa, diversity, and eveness are presented in Table 3a. Number of taxa and Shannon-Weiner diversity differed significantly among types of substrate and depths (when pooled in 10 m intervals, Table 3b). The effect of depth was significant only at depths >30 m; r<sup>2</sup> (depth vs. number of taxa) was <0.093 in all years over all depths. Samples from mud and silt contained significantly more taxa than did those from sand. These results confirm the importance of depth and/or type of substrate in controlling the distribution of benthic animals, emphasizing that these variables must be taken into account when attempting to interpret temporal or spatial variations in community structure and composition.

Total abundance of invertebrates also varied among samples, years and substrates. Abundance increased with depth at stations along the open shore of Lake Superior south of The Peninsula (r<sup>2</sup> = 0.427 to 0.635), especially on sand and gravel. There was no apparent relationship between depth and abundance in Peninsula Harbour or its subdivisions (Jellicoe Cove, Carden Cove, Beatty Cove). Sampling efficiency was probably not very high on gravel since there was a fairly strong correlation between

Table 2. List of the benthos of Peninsula Harbour and the percentage of samples in which the species occurred during each survey (# in parentheses represent total number of samples taken).

Taxon	P	ercent Occi	of sta		Taxon		nt of S curring	Station: at	S
	69 (109)	76 (61)	77 (78)	89 (182)		69 (109)	76 (61)	77 (78)	89 (182)
Platyhelminthes (flatworm	ıs)				G. pseudolimnaeus	26	8	13	10
Dugesia tigrina	0	2	0	1	Crangonyx gracilus	0	0	3	3
Cura foremanii	0	0	0	2	Hyalella azteca	0	0	1	0
Oligochaeta (worms)					Mollusca (clams and si	nails)			
Stylodrilus herengianus	56	45	73	64	Valvata sincera	6	11	13	7
Aulodrilus americanus	0	3	0	1	Valvata tricarinata	0	2	4	2
A. pluriseta	0	0	1	0	Amnicola limosa	0	0	1	1
I. templetoni	1	0	0	1	Fossaria	0	5	3	3
Limnodrilus angustipennis	s 1	0	0	0	Lymnaea	0	0	0	0
L. claparedianus	1	2	1	3	Physella <sup>1</sup>	0	0	0	1
L. hoffmeisteri	29	19	13	7	Gyraulus	0	0	0	1
L. profundicola	7	3	3	2	Helisoma	0	2	1	0
L. udekemianus	1	0	1	0	Pisidium spp.	36	39	49	20
Potamothrix vejdovsky	0	0	0	1	P. amnicum	2.7	0	0	0
Rhyacodrilus spp.+	1	0	26	7	Sphaerium	1	11	23	12
R. coccineus*	4	21	5	5					
R. montana +	2	2	0	5	Diptera (flies)				
R. sodalis¹	0	0	0	1	Ablabesmyia	3	2	0	1
Spirosperma ferox	0	0	3	5	Procladius	17	27	50	19
Tasserkidrilus superiorensi	is 0	0	1	1	Thienemannimyia	1	0	4	3
T. kessleri	0	0	0	1	Pagastia sp. A	0	2	15	1
Tubifex ignotus	1	0	1	5	Potthastia longimanus	0	2	3	1
T. tubifex	20	15	18	12	Protanypus sp. A	6	2	15	1
Enchytraeidae sp. 1	0	0	0	1	M. tuberculata	10	13	31	21
Enchytraeidae sp. 2	0	0	0	1	Prodiamesa	0	7	6	1
Stylaria lucustris	0	3	0	1	Brillia	0	2	0	0
					Cricotopus spp	0	2	2	5
Hirudinea (leeches)			_		Heterotrissocladius	•			
Erpobdella punctata	3	0	0	0	marcidus	0	16	3	4
Nephelopsis obscurus	2	2	6	2	subpilosus	6	0	3	1
Helobdella triserialus	0	0	1	2	Hydrobaenus pilipes	1	0	0	0
					Orthocladius	0	0	0	1
Isopoda (aquatic sowbugs)					Paracladius	0	0	1	5
Caecidotea racovitzai	32	32	24	10	Parakiefferiella	0	0	0	1
Lirceus lineatus	1	0	0	1	Psectrocladius	1	0	12	6
					Synorthocladius	0	0	1	0
Mysidacea (opossum shrin					Chemovskiia orbicus	5	7	1	5
Mysis relicta	4	3	28	17	Chironomus	17	3	6	7
					Cladotanytarsus	0	0	0	1
Amphipoda (scuds)	48.17				Cryptochironomus	0	3	0	
Pontoporiea hoyi	91	68	80	72	Cryptotendipes 1	0	2	0	2

Table 2 (con't)

Taxon	P	ercent Occi	of sta arring		Taxon	Percent of Stations Occurring at					
	69 (109)	76 (61)	77 (78)	89 (189)		69 (109)	76 (61)	77 (78)	89 (189)		
Denticryptochironomus	0	2	0	1							
Einfeldia	20	3	8	9	Ceratopogonidae	0	0	3	2		
Lipiniella	0	0	3	1	Empididae	0	0	0	1		
Microtendipes pedellus	0	0	0	1							
Parachironomus arcuata	1	0	0	1	Ephemeroptera (mayfl	ies)					
Paracladopelma nigritula	7	8	36	21	Ephemera simulans	0	0	0	1		
Paralauterborniella <sup>1</sup>	0	0	0	1							
Paratanytarsus	1	0	0	1	Trichoptera (caddisflie	s)					
Paratendipes	1	2	0	1	Mystacides sepulchrali.	0 3	0	0	1		
Phaenopsectra	8	19	19	3	Oecetis sp.1	0	0	0	1		
Polypedilum	50	45	44	27	Limnephilidae	0	0	0	1		
Stictochironomus	1	2	10	9							
Tanytarsus	5	5	15	13	Odonata (dragonflies)						
Dicrotendipes	0	0	0	1	Cordulegaster sp.1	0	0	0	1		

Species of Rhyacodrilus were combined for statistical analysis. Taken from Port Munro only.

Table 3a. Average values for # of taxa, diversity, and evenness with respect to year, depth, and substrate type (A = 0-10 m, B = 11-20 m, C = 21-30 m, and D = > 30 m).

Category				1969									1989					
		mediu	11				fine	:			Medi	ium				fi	ne	
	Α	В	С	D	,	Α	В	С	D	Α	В	С	D	A		В	С	D
No. of taxa	3.8	4.4	6.0	6.3		8	11.3	8.4	7.0	6.4	6.3	4.0	5.5	1	4.5	15.3	10.0	4.8
Diversity	1.1	1.0	1.3	1.4		2.2	2.1	1.8	1.3	2.1	1.7	1.4	1.4		2.4	3.0	2.6	1.1
Evenness	0.51	0.52	0.53	0.54		0.7	0.6	0.64	0.48	0.79	0.67	0.61	0.58		0.73	0.77	0.82	0.48

Table 3b. Statistical summary of three-way ANOVA (p < 0.05) for No. taxa, diversity, and evenness (1 = increase, D = decrease).

Parameter	Significant Difference Between Years	Significant Difference Between Substrates	Significant Difference Between Depths	Significant Year/ Substrate Interaction	Significant Year/ Depth Interaction	Significant Depth/ Substrate Interaction	Significant Depth/Year/ Substrate Interaction
No. of Taxa	No	Yes(1)	Yes	No	Yes	Yes	No
Diversity	No	No	Yes	Yes	Yes	Yes	Yes
Evenness	No	No	No	Yes	No	No	No

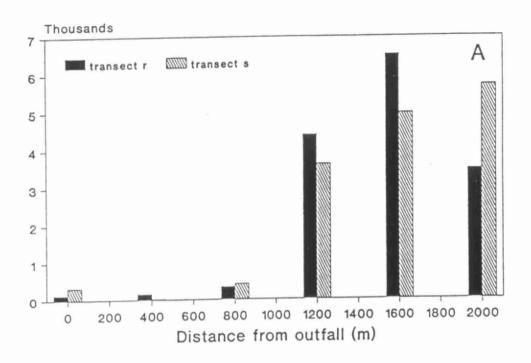
number of taxa and total abundance only on this type of substrate in any survey.

These observations confirmed that little confidence could be placed in apparent differences at individual stations between survey years. The lack of replicate samples and the large variability among stations with similar substrata at similar depths indicated that inter-year comparisons were possible only for fairly large subsections of the study area, so we divided the area into 5 zones as described above. Similar (but not identical) ranges of depth and type of substratum were sampled in each zone during each survey.

The most complete sampling of the area around the main mill outfall on the open shore of Lake Superior was done in 1969 and 1989. In both years the total abundance of benthos was significantly lower (based on ANOVA and Tukey HSD test) at inshore stations (<1000 m from the outfall) than at offshore stations (Figure 6), but there were no significant differences among either inshore or offshore stations in either year. At stations further to the south (i.e. remote from the outfalls), total abundance increased somewhat more regularly with distance lakeward (Figure 7), so that abundances differed significantly only between the closest and furthest stations from shore. Similar small numbers of invertebrates were collected on sand and gravel at inshore stations in both years, regardless of proximity to the outfall. The higher densities of animals offshore corresponded fairly closely with the distribution of fine-grained sediments (silt). About 2-3x as many invertebrates were found on silt off the outfall in 1969 as in 1989. About half as many animals were found in samples from silt in the southern part of the study area as off the outfall in 1989.

Numbers of taxa also increased with distance from shore, with counts of <5 per sample inshore and up to 9 per sample offshore. Values were slightly higher in the northern, offshore portion of the zone in 1969 than in 1989. The distributions of the dominant species in this zone, P. hoyi and S. heringianus, did not appear to change substantially over time.

With the exception of Carden Cove which was not sampled in 1976, each of the other zones was subjected to comparable sampling efforts in each survey year. The only major differences in sampling effort among years were the relative oversampling of sandy substrata in Peninsula



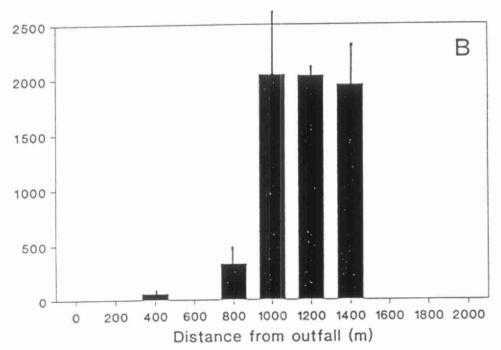


Figure 6. Relatioship between total abundance of invertebrates and distance from shore for stations in the vicinity of the pulp mill and STP outfalls in 1969 (A) and 1989 (B). Bars in (A) represent single samples; vertical lines in (B) represent 1 Standard Error.

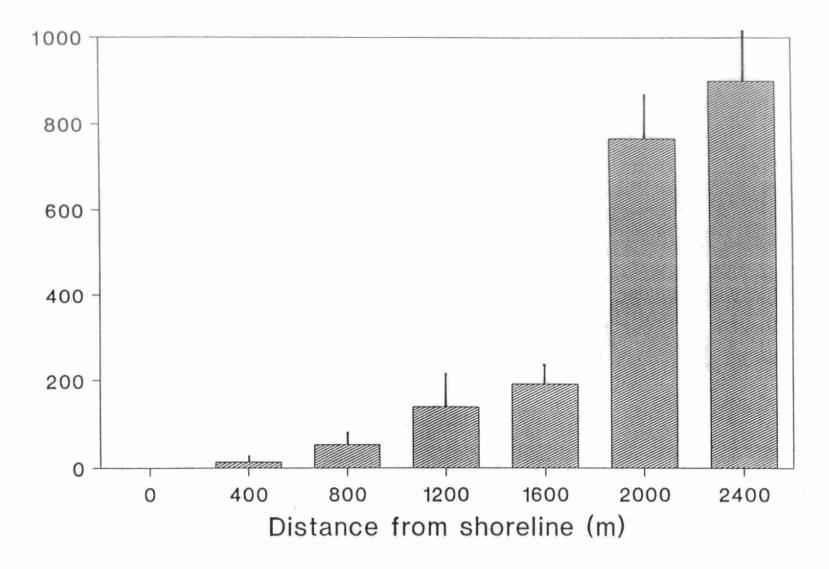


Figure 7. Relationship between total abundance of invertebrates and distance from shore on transects S, T and U of the 1989 survey. Vertical lines indicate 1 Standard Error.

Harbour in 1976, and of mud/silt in Jellicoe Cove in 1969. If changes have occurred over time, we would expect the results of the surveys of 1976 and 1977/78 to be most similar and those from the 1989 survey to show the greatest effect of remedial measures. The animals from each zone during each survey were compared with this in mind.

Total abundance of invertebrates in Beatty Cove exhibited the expected pattern: total abundance of invertebrates (mainly Tubificidae) declined sharply from 1969 to 1976, and again between 1977/78 and 1989. Densities of benthic invertebrates varied irregularly among years in Jellicoe Cove and Peninsula Harbour (Figure 8). Variances associated with the mean values shown in Figure 8 were extremely large so that differences among years were not significant. The only consistent trend was toward lower densities in 1989. Average numbers of taxa in each zone were less variable and showed no systematic variation across years (Figure 9). Again, variances associated with the values were large so that no means were significantly different within zones between years. Beatty Cove yielded the largest numbers of taxa per sample followed by Jellicoe Cove, Peninsula Harbour and Carden Cove, in that order.

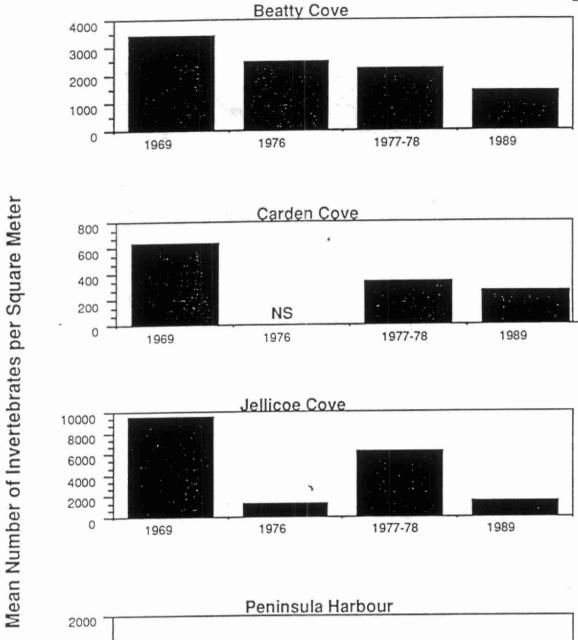
The average abundances of the dominant taxa in these zones are shown in Figures 10 and 11. These taxa can be roughly divided into three groups: tolerant species characteristic of eutrophic or degraded areas such as the tubificids Limnodrilus spp. and T. tubifex (Lauritsen et al. 1985), relatively intolerant species including P. hoyi and S. heringianus; and "mesotrophic" taxa such as Pisidium spp., C. racovitzai, Procladius and Polypedilum (Barton 1988). Except in Carden Cove where total invertebrate densities were always low, tolerant species tended to be less abundant in 1989 than in earlier years. Neither tubificids nor Pisidium exhibited any regular pattern of change over the period of study, as maximum numbers of both of the these taxa occurred in 1969, 1976 or 1977/78 in different zones. Densities of intolerant and "mesotrophic" species also fluctuated irregularly from year to year; the only exception was the steady increase of S. heringianus over time in Peninsula Harbour.

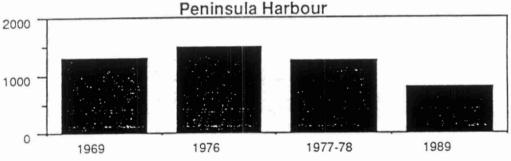
Stations in Beatty Cove consistently had the most "diverse" benthic assemblages as measured by Shannon-Wiener's H (Figure 12). Average

values of H in 1989 were slightly higher than in 1969 in most of the zones but these differences were generally smaller than the differences between the surveys of 1976 and 1977/78. Year-to-year differences were greatest in Jellicoe Cove and Peninsula Harbour but the pattern of change was opposite in the two zones. Average values of E were very nearly identical among surveys in any zone.

Values of Milbrink's (1983) Trophic Index based on the oligochaete species found in each sample, ranged from 0 to 3 (Appendix B). Average values in each zone were highest in 1969, except in Peninsula Harbour were maximum values were recorded in 1976 (Figure 13). The Trophic Index tended to decline over time in Peninsula Harbour and Carden Cove, but rose slightly in 1978 and/or 1989 in Beatty and Jellicoe Coves. Average values were less than 0.5 in most zones in most years, suggesting that the study area is not heavily contaminated with organic matter. The sharp decline in the Trophic Index in Jellicoe Cove between 1969 and 1976 suggests a decrease in inputs of organic matter, however, it should be noted that the proportion of stations which had mud substrata in Jellicoe Cove was greater in 1969 than during subsequent surveys.







## Survey Year

Figure 8. Average densities of all invertebrates in samples from the zones defined in the text. NS = not sampled.

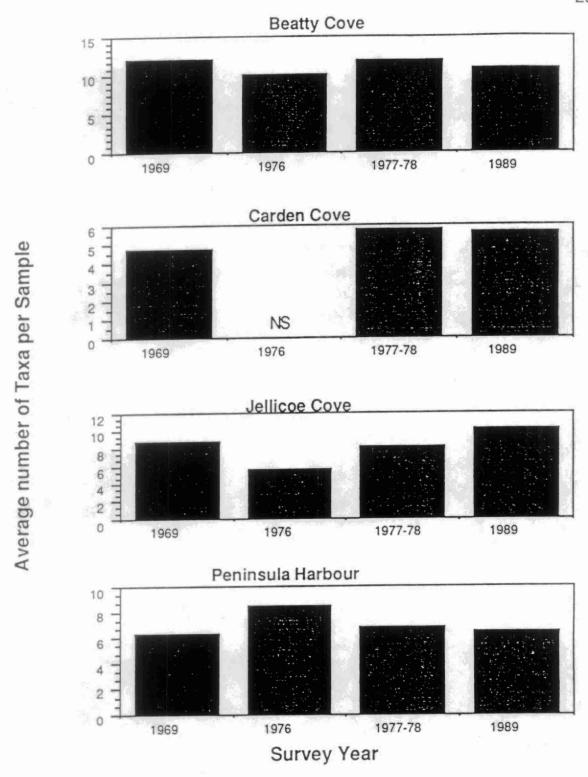
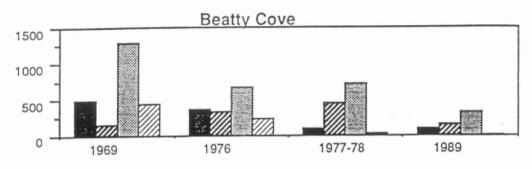
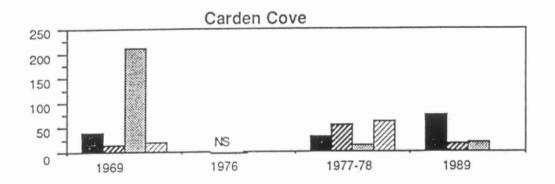
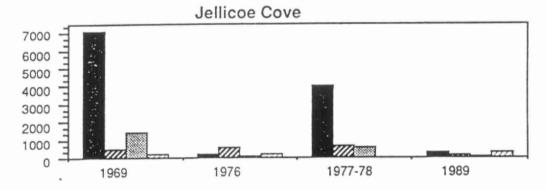


Figure 9. Average number of taxa found in samples from each zone during each survey.









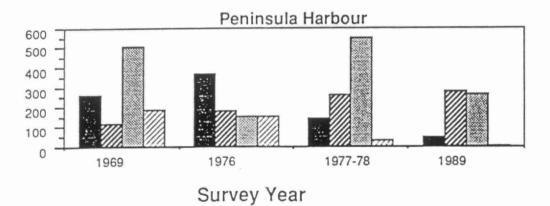


Figure 10. Average abundances (# m-2) of selected taxa in each zone during each survey. ■ = Limnodrilus spp. + T. tubifex, ■ = S. heringianus = P. hoyi, □ = C. racovitzai.

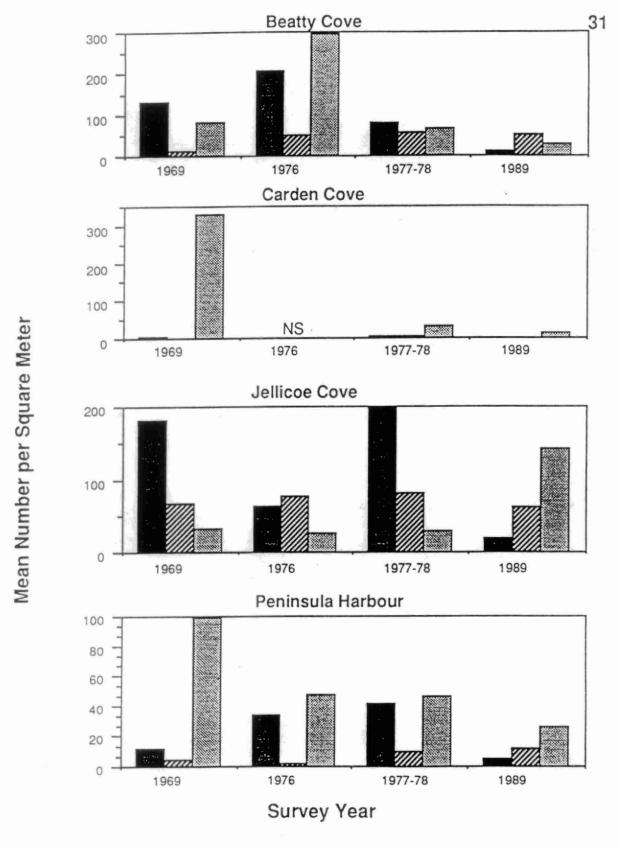


Figure 11. Densities of Pisidium spp. Procladius and Polypedilum spp. found in each zone during each survey.



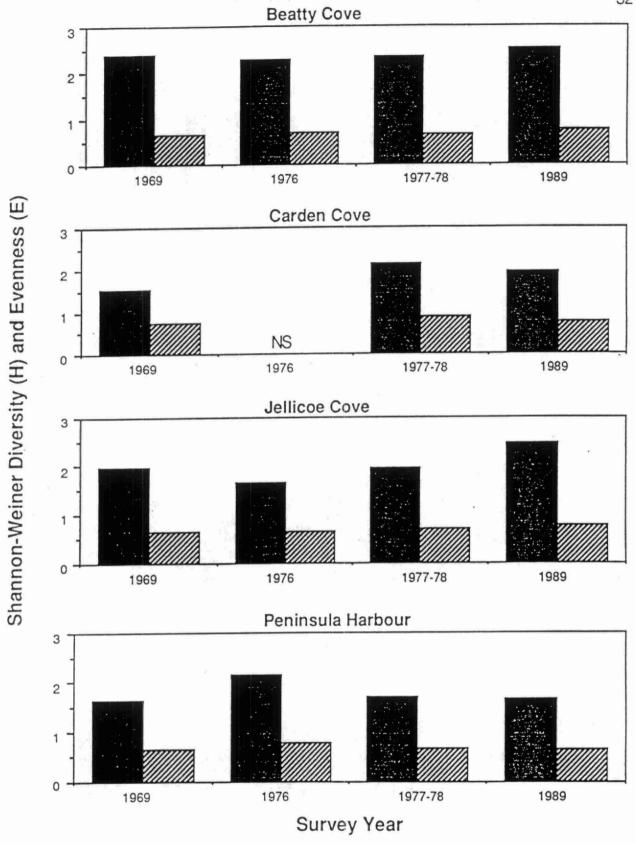


Figure 12. Average values of Shannon-Weiner diversity in samples from each zone during each survey.

and evenness

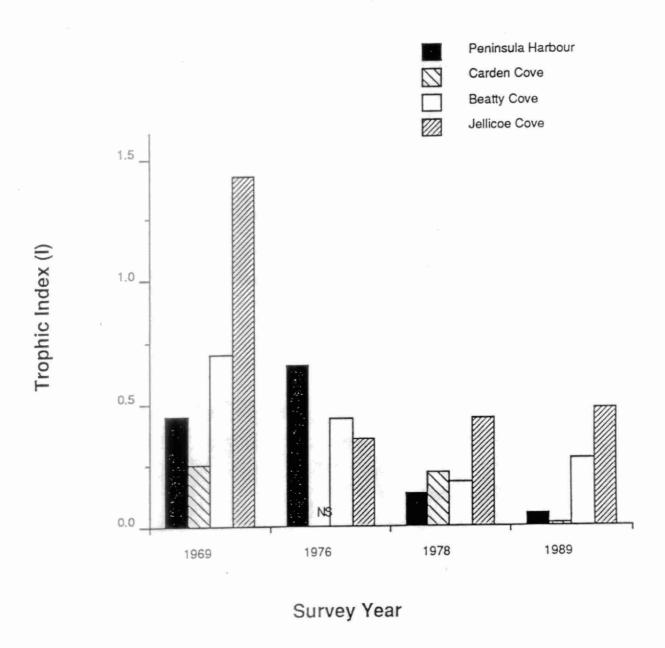


Figure 13. Average Trophic Index score (I) in various zones during each survey.

#### 5.0 DISCUSSION

In general, the results of the benthic surveys conducted in the study area over the past 20 years suggest that the nearshore benthos of Lake Superior in the vicinity of Marathon have been only lightly impacted by the discharges generated by the pulp mill, ancillary industry and the local population. Most of the benthic species found during these surveys are typical of nearshore Lake Superior, with P. hoyi and S. heringianus occurring at densities very similar to those which have been reported elsewhere in the Great Lakes (Freitag et al. 1976, Nalepa & Thomas 1976, Golini 1979, Nalepa 1987, Evans et al. 1990). The abundance of the tolerant tubificids L. hoffmeisteri and T. tubifex indicates local deterioration of water quality in Jellicoe Cove and other parts of Peninsula Harbour in at least some years.

This optimistic assessment reflects the location of the outfalls from both the pulp mill and the municipal sewage treatment plant along the open shore of Lake Superior, an extremely high-energy environment which promotes dilution and dispersion of the effluents. Intensive sampling in the immediate vicinity of the outfalls would probably reveal an area of impact, but the sampling grid and lack of replicate samples in previous surveys were too coarse to show an effect. Different sampling methods would be needed for such work: the extremely low densities of animals found along the open shoreline are largely due to the inefficiency of grab samplers on large-grained inshore substrata. More effective techniques, such as core or air-lift samples collected by divers, would almost certainly reveal a richer fauna with more scope for response to anthropogenic stress. However, the size of any such zone of impact is unlikely to seem significant in comparison with the effect of pulp-mill effluents on the more sheltered Jackfish Bay (Farara et al. 1988).

This is not to suggest that human activity around Marathon has not affected the benthic fauna in adjacent waters. The most striking result of the benthic surveys of the area is the absence of insects other than Chironomidae, especially at stations less than 20 m deep. Groups of insects such as Ephemeroptera, Plecoptera and Trichoptera are the most sensitive to environmental degradation (e.g. Lenat 1988), and are usually common in

pristine bays of Lake Superior. For example, Thomas (1966) collected Ephemeroptera at nearly half of his 'offshore' (i.e. depth >2m) stations in Batchawana and Mountain Bays. Mayflies were characteristic of the benthic communities of Nipigon Bay outside of the zone affected by effluent from a pulp and paper mill (Freitag et al. 1976, Vander Wal 1977). Trichoptera, Odonata and Plecoptera were also common in these other embayments, and along the open lakeshore (Barton and Hynes 1978). None of these orders was represented by more than a few individuals during the four surveys of Peninsula Harbour. This suggests that water quality is less than ideal throughout the entire area covered in the present study.

Detection of changes in benthic communities over time is hampered by the same aspects of the study design mentioned above. Our division of the study area into zones was based on physical characteristics and location so that the pooling of samples from a number of stations in any one year should mask the natural variability among individual grab samples. In view of changes to the operation of the James River-Marathon pulp mill, we expected the results of the 1976 and 1977/78 surveys to be the most similar and the largest changes in the fauna to occur between 1978 and 1989. On the basis of improvements in water and sediment chemistry reported by Jardine and Simpson (1990), we expected the magnitude of the benthic community response to be greatest in Jellicoe Cove and our Peninsula Harbour zone.

The data did not conform to these expectations. There was a greater difference in the average number of taxa between 1976 and 1977/78 than between 1969 and 1989 in all zones sampled, and the direction of change between surveys (increase or decrease) differed among zones. The abundances of most of the important individual taxonomic groups also varied erratically over time. For example, densities of tolerant species of Tubificidae were higher in Beatty Cove and Peninsula Harbour in 1976 than in 1977/78, but much lower in Jellicoe Cove.

The reasons for such variation from year to year are difficult to determine in retrospect. One possible source of error is that the animals were sorted from the grab samples in the field, a procedure which is prone to systematic errors due to physical conditions (e.g. the weather) or changes in the personnel doing the sorting. The larger numbers of individuals of most groups, especially *P. hoyi* and Tubificidae, collected

from most stations in 1969 relative to the later surveys are consistent with this type of error.

It is equally possible that the results of these surveys realistically reflect the degree of annual variability of a rather severe habitat. This is somewhat counter-intuitive since the enormous volume of Lake Superior tends to dampen the amplitude of variation in the open lake. This same large volume also means that the lake tends to be much colder than other lakes at the same latitude. Uniform thermal conditions, as well as dispersal of nearshore discharges, are further promoted by the strong currents developed by winds blowing over the long fetches in most directions. Short periods of calm weather are unlikely to have major impacts on a lake-wide scale, but may be very important in embayments and other nearshore areas. Calm, hot weather could lead to thermal stress for nearshore benthos, or might result in locally prolonged exposure to higher or lower concentrations of effluents from municipal or industrial discharges. This sort of phenomenon has been blamed for the demise of Hexagenia in western Lake Erie (Britt 1955). Large annual variations in the abundances of dominant benthic invertebrates may be characteristic of anthropogenically stressed areas in the Great Lakes, as shown by the large differences in the densities of P. hoyi in lower Bay of Quinte reported by Johnson and McNeil (1986). Whether or not large annual fluctuations in the abundance of benthic animals are also common in relatively pristine areas cannot be assessed until long-term data become available.

Whatever the cause of the variability among surveys, the data suggest that there have been no major changes in the benthic communities of the study area over the past 20 years. This is based both on summary indices such as total abundance, number of taxa and H', as well as the abundances and distributions of individual taxa. Summary indices either did not change over time (e.g. number of taxa, H'), or else varied erratically among years and zones (e.g. total abundance, I). The only exception was that the Trophic Index appeared to decline somewhat over time in most parts of Peninsula Harbour. Observations based on individual taxa were contradictory. Some animals known to be very tolerant of degraded conditions such as L. hoffmeisteri and T. tubifex, as well as less tolerant species such as P. hoyi, were less abundant in 1989 than in earlier surveys. On the basis of known responses of these two groups of organisms to

effluents from pulp and paper mills (e.g. Vander Wal 1977, Farara et al. 1988) we would expect the abundance of *P. hoyi* to increase as tolerant tubicids decrease.

The tolerances of other organisms to pulp mill effluents are largely unknown so it is difficult to interpret the apparent increase in variety of, for example, Chironomidae in Peninsula Harbour: 19 taxa in 1969, 22 in 1976 and 1977/78, and 34 in 1989. Most of these occurred at <5% of the stations in any year. Nearly twice as many samples were collected in 1989 as in earlier surveys and the average number of taxa per station did not change, suggesting that much of the increase can be attributed to sampling effort.

There appears to have been a real decline in abundance of C racovitzai in most of the study area between 1978 and 1989, but this is more likely to reflect the decline in log-booming activity than a change in water chemistry. There was a small increase in numbers of isopods in Jellicoe Cove where there was a resumption of log booming in 1987 and 1988, and no change in abundance of C. racovitzai in Beatty Cove where much of the settled bark has been covered by sediment since 1976 (D.M. Pugh, pers. comm.).

In conclusion, the results of surveys of benthic invertebrates in the area of Marathon and Peninsula Harbour from 1969 through 1989 appear to indicate that the fauna is, for the most part, typical of what would be expected in nearshore areas of Lake Superior. The densities of the dominant species (P. hoyi, S. heringianus) in deeper water (>15m) were similar to those reported from comparable depths elsewhere in the Great Lakes. The abundances of Limnodrilus spp. and T. tubifex in areas such as Jellicoe Cove suggested fairly severe local degradation of water and/or sediment quality. No consistent, significant changes in the fauna over the 20 yr study period could be detected, except perhaps some improvement in Jellicoe Cove. The absence of insects other than Chironomidae from the study area suggests that the whole of the Peninsula Harbour area has been somewhat degraded by human activities.

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**APPENDICES** 

APPENDIX A

BIOLOGICAL DATA

TABLE A1: ABUNDANCE DATA (1969) (no. m )

STATIONS:	a1	a2	a3	a4	a5	a6	a7	ь1	62	ь3	b4	b5	b6	ь7	c1	c2	c3	c4	С
URBELLARIA																			ē
Tricladida								0	0	0	0	0	0	0	0	0	0	0	
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0		0	0	20	0	0	0	140	0	0	20	520	160	
S. heringianus	0	0	0	20	40	20 0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
L. hoffmeisteri	0	0	0	20	0	0	0	0	20	0	0	0		20	20	0	0	0	
L. profundicola	0	20	0	0	20	0	0	20	0	0	0	0		0	0	0	0	0	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0		0	0	20	0		
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0		
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0		
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0		
R. montana	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0		
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0			
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0			
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0			
T. kessleri	0	0	0	0	0	0	0	0	0	-	0	0		0	0	0			
Tubifex ignotus	0	0	0	0	0	0	0	0	0			0		0	0	0			
T. tubifex	0	0	0	0	0	0	0	0	0			0		0	0	0			
	0	0	0	0	0	0	0	20	0	0		0		60	0	40		-	
With hair setae	20	20	0	0	40	20	0	0	20			-		0	60	0	100		
Without hair setae	20	0	0		0	0	0	0	0			0		0	0	0			
	0					0	0	0								0			
Enchytraeidae sp.1	0					0	0	0								0	0	0	į
Enchytraeidae sp.2	0	0				0	0	0				0	0	0	0	0	0		
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-0				
Stytal is toosa.	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0						
HIRODINE.	0	0	0	0	0	0	0	0	0	0	0								
Erpobdellidae	0	0	0	0	0	0	0	0	0							-			
Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	k

TABLE A1: ABUNDANCE DATA (1969) (no. m )

STATIONS:	a1	a2	а3	a4	a5	а6	a7	b1	ь2	<b>b</b> 3	ь4	<b>b</b> 5	b6	ь7	c1	c2	c3	c4	c5
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	40
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0
1 SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACCOUNTING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae Caecidotea racovitzai	0	80	0	320	0	80	0	20	60	0	0	0	0	0	1260	0	0	0	720
Lirceus lineatus	0	0	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Efficeus (fileacus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
AMPHIPODA	0	0	0	0	,0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi	140	360	40	180	520	140	40	40	260	340	400	480	300	140	180	560	380	860	20
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae.	0	0	0	0	0	0	0	0	40	0	0	0	20	0	260	0	0	0	400
Gammarus pseudolimnaeus	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracitos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ő
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
And the Contract of the Contra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969) (no. m )

	a1	a2	а3	a4	a5	а6	a7	ь1	b2	b3	b4	b5	b6	b7	c1	c2	<b>c</b> 3	c4	<b>c</b> 5
STATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n-biidaa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	20	0	0	0	0	0	0	0	0	0	0	40	20	0	0	0	0	0
Pisidium sp. Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	20	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8" 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	0
Monodiamesa tuberculata	0	0	0	0	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0
Prodíamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	Q
Cricotopus (Isocladius)	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0		0	-	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0					0	0	0	0	0	0	0	0		0	0	0
pilipes grp.	0	0	0					0	0	0	0	0	0	0	0		0		0
Orthocladius	0	0	0					0	0	0	0	0	0	0	0		0		
Paracladius	0	0	0					0	0		0	0	0	0	0		0		
Parakieferiella	0	0	0					. 0			0	0	0	0	0		0		
Psectrocladius	0	0	0					0		-		0	0	0	0				
Mesopsectrocladius	0	0	0	-				7				0	0	0	0				
Synorthocladius	0	0		-						-		0	0	0	0				
	0		-									0	0	0	0				
Chironominae	U	U	U	U	·		•	Ü				-	-						

TABLE A1: ABUNDANCE DATA (1969) (no. m )

STATIONS:	a1	a2	а3	a4	a5	a6	a7	b1	b2	b3	64	Ь5	b6	ь7	c1	c2	c3	c4	<b>c</b> 5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0 40	0 180	0	40	0 220
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crytptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp. Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polypedilum/Pedionomus	40	220	20	60	800	140	0	0	100	40	120	20	120	380	20	20	0	0	20
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
rany tar sus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
citt oriolitade (paper)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
er dropogom sac	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Condulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969) (no. m )

a1 a2 a3 a4 a3 a6 a7 b1 bc		
STATIONS: 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 0
Cottidae 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 0
220 740 80 820 1420 420 60 100 540 380 540 500 700 640 1880	840 900	
Total Abundance 7 7 7 5 6 2 4 8 2 3 2 8 6 9		4 9
Total # of Taxa 1.49 1.94 1.5 2.18 1.37 2.14 0.92 1.92 2.3 0.49 0.98 0.24 2.3 1.72 1.66	1.46 0.98	0.95 2.19
Diversity Index 1.49 1.94 1.5 2.16 1.57 2.18 0.75 0.76 0.49 0.62 0.24 0.78 0.66 0.52 0.75 0.69 0.95 0.78 0.59 0.83 0.92 0.96 0.76 0.49 0.62 0.24 0.78 0.66 0.52	0.57 0.98	0.47 0.69
Pielou's Evenness 0.75 0.89 0.95 0.78 0.37 0.83 0.72 0.75 0.89 0.95 0.78 0.37 0.83 0.75 0.89 0.95 0.78 0.37 0.83 0.72 0.73 0.89 0.95 0.78 0.37 0.83 0.72 0.73 0.83 0.72 0.73 0.83 0.72 0.73 0.83 0.72 0.73 0.83 0.72 0.73 0.83 0.72 0.73 0.83 0.72 0.73 0.83 0.73 0.73 0.83 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.7	16.2 14.6	14.6 16.5

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	c6	d1	d2	ďЗ	d4	d5	d6	e1	e2	e3	e4	<b>e</b> 5	e6	f1	f2	f3	g1	g2	g3
TURBELLARIA																			
Tricladida																			
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. heringianus	20	0	0	0	200	1020	100	0	20	0	800	160	260	40	0	100	100	0	420
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
Limnodrilus angustipennis	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. hoffmeisteri	280	160	0	0	0	0	0	0	20	0	0	560	0	0	0	40	300	0	0
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	100	0	0
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T. kessleri	0	0	0	0	0	0	٥	0	0	0	0	0	0	0	0	0	0	0	0
Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
T. tubifex	40	1060	20	0	0	0	0	0	20	0	0	60	0	400	160	0	200	6720	80
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
With hair setae	100	960	20	0	0	0	0	540	160	0	60	260	80	540	500	20	1620	4340	40
Without hair setae	40	0	0	0	0	40	0	0	140	0	0	980	20	100	0	20	300	400	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdella punctata	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	с6	d1	d2	d3	d4	d5	<b>d</b> 6	e1	e2	e3	e4	<b>e</b> 5	e6	f1	f2	f3	g1	g2	93
Nephelopsis obscurus	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	100	0	0	120	40	180	40	0	0	180	20	0	1840	240	320	140	20
Caecidotea racovitzai	2460	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HISIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nysis recrees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi	680	0	360	280	1720	660	1380	300	140	200	2420		2860	0	0	400		600	440
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	0	0	0
Gammarus pseudolimnaeus	1260	0	20	0	0	80	0	160	20	0	0	0	0	0	40	120	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
gas rivor our	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q_
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Amnicola limosa	0	0	0	0	0	0	0	0	0	0			0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			0	0	0	0			0
Lymnaeidae	0	0	0	0	0	0	0	0	0	0			0	0	. 0	0			
Fossaria	0	0	0	0	0	0	0	0	0	0			0	0	0	0			0
Lymnaea	0	0	0	0	0	0	0	0	0	0			0	0	0	0			
	0	0	0	0		0	0	0	0	0			0	0	0	0			
Physidae	0	0	0	0			0	0	0	0			0	0	0	0			
Physella	0	0	0	0		0	0	0	0	0				0		0			
	0	0	0	U	U	U	U	U	U		U	U		0					

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	с6	d1	d2	d3	d4	d5	d6	e1	e2	e3	e4	<b>e</b> 5	<b>e</b> 6	f1	f2	f3	g1	g2	g3
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	40	20	20	0	20	0	0	60	0	0	80	0	0	0	80	0	360	600	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0
Tanypodinae	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	20	0	0	0	0	0	20	20	0	0	20	0	0	0	60	0 40	200	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	100	0	0	0	0	0	0	20	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0~
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CIT I COOMITAGE	U	Ů.	0		V		U	.0		U	U	U	U	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

Section (Behavior II) and																			7/10
STATIONS:	с6	d1	d2	d3	d4	d5	d6	e1	e2	e3	e4	e5	e6	f1	f2	f3 0	g1 0	g2 0	g3 0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 340	160	0	200	20
Chironomus	0	60	20	0	0	0	0	20	40	20	0	120	0	20	340	0 0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crytptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	80	40	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	260	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0	0
Phaenopsectra	100	20 120	120	20	0	100	0	640	140	160	60	20	0	60	100	540	60	20	0
Polypedilum/Pedionomus	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus	0	0	0	0	20	20	0	0	0	0	0	0	0	20	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
• • • •	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
or a straight during	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
· /bilidas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2101	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISH	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius																			

#### TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	с6	d1	d2	d3	d4	ď5	d6	e1	e2	e3	e4	e5	e6	f1	f2	f3	g1	g2	g3
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Abundance	5080	2560	680	300	1960	2140	1520	1960	760	680	3420	4740	3340	1280	3080	1700	5520	****	*1020
Total # of Taxa	17	9	8	2	4	8	3	10	11	6	5	11	9	10	8	10	13	9	6
Diversity Index	2.1	1.52	2.08	0.35	0.64	2.03	0.52	2.49	2.96	1.99	1.18	2.29	0.91	2.29	1.87	2.7	2.61	1.85	1.74
Pielou's Evenness	0.59	0.48	0.69	0.35	0.32	0.68	0.33	0.75	0.86	0.77	0.51	0.66	0.26	0.69	0.62	0.81	0.71	0.58	0.68
Station Depth (m)	15.3	6.1	10.4	14.6	16.5	18.3	22.9	5.8	8.54	5.49	27.5	41.2	32	1.22	5.49	4.88	13.7	14.6	6.7

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	g4	g5	g6	h1	h2	h3	i 1	12	i3	j1	j2	k1	k2	l 1	12	13	m1	m2	n1
STATIONS.	-																		
* * * * * * * * * * * * * * * * * * *																			
TURBELLARIA																			
Tricladida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. heringianus	700	280	0	1880	0	1120	1000	300	260	40	0	200	20	0	40	0	100	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	160	20
L. hoffmeisteri	60			0	2440	0		20	0	0	0	0	0	0	0	0	0	0	0
L. profundicola	0	0		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
L. udekemianus	0	0			0	0		0	0	0	0	0	0	0	0	0	0	0	0
Potamothrix vejdovsky	0	0			0	0		0	0	0	0	0	0	0	0	0	0	0	40
Rhyacodrilus sp.	0	0			0	0		0	0	0	0	0	0	0	0	0	0	0	0
R. coccineus	0	0			0	0		0	0	0	0	0	0	0	0	0	360	280	0
R. montana	0	0			0			0	0	0	0	0	0	0	0	0	0	0	0
R. sodalis	0	0			0		-	0	0	0	0	0	0	0	0	0	0	0	0
Spirosperma ferox	0	0			0		-	0	0	0	0	0	0	0	0	0	0	0	0
Tasserkidrilus superiorensis	0	0						0	0	0	0	0	0	0	0	0	0	0	0
T. kessleri	0	0						0	0	0	0	0	0	0	0	0	0	0	0
Tubifex ignotus	0	0			10960			0	0	240	940	0	0	0	20	0	0	60	50
T. tubifex	60	0				0		0	0	0	0	0	0	0	0	0	0	0	0
	-		7860		17060		4280	200	480	540	360	0	0	140	240	0	400	160	220
With hair setae	820 120		2460		3660				40	40	120	0	0	0	0	0	0	60	40
Without hair setae	0			-		-			0	0	0	0	0	0	0	0	0	0	0
- down the an 1	0								0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.1	0								0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.2	0									0	0	0	0	0	0	0	0	0	0
Naididae	0						0	0	0	0	0	0	0	0	0	0	0	0	0
Naididae Stylaria lacustris	0						0	0	0	0	0	0	0	0	0	0	0	0	0
Stylaria lacusti is	0					0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIRUDINEA	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIROUINEA	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdella punctata	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpooderra ponerara																			

TABLE A1: ABUNDANCE DATA (1969)

	2/	g5	g6	h1	h2	h3	<b>i</b> 1	12	i3	j1	j2	k1	k2	L1	12	13	m1	m2	n1
STATIONS:	g4 0	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retobbetta triseriatis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I SOPOOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	q
150000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	300	640	0	0	100	260	100	0	0	0	0	0	0	0	0	0	400	40	20
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2112020 11110213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ç
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	20	0	20	0	0	20	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pontoporeia hoyi	1760	740		1320	1720	3920		3040	4160			200	680	2040			2500		1240
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	380	80	60
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	20	0	60	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	de la
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q_
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	20	O
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobi idae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>V</b>
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fillectio	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A1: ABUNDANCE DATA (1969)

TABLE ALL																		_	
STATIONS:	g4	g5	g6	h1	h2	h3	i 1	12	13	j1	j2	k1 0	k2 0	l1 0	0	0	m1 0	m2 0	n1 0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPO0A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	40	120	0
Pisidium sp.	260	260	0	40	20	100	20	0	260	0	0	0	0	0	0	0	20	0	0
Pisidium amnicum	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	20	0
Procladius	140	20	20	0	0	180	20	0	0	0	0	20	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	20	20	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Monodiamesa tuberculata	40	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0		
Brillia	0	0	0	0	0	0	0	0		0	0	0	0		0	0	0		
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0		0	0	0	0	0		0	0		
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Heterotrissocladius	0	0	0	0	0	0		0		0	0	0	0	0	0	0	0		
marcidus grp.	0	0	0	0	0			0			0	0	0	0	0	0	0		
subpilosus grp.	0	0	0	0	0			20				0	0	0	0	0	0	-	
Hydrobaenus	0	0	0	0	0	0		0					0	0	0	-	0		
pilipes grp.	0	0	0	0	0	0	0	0	1.00			0		0	0	0		-	
Orthocladius	C	0	0	0	0	0	0	0						0	0	0	0		
Paracladius	C	0	0	0	0	0				_						0	0		
Parakieferiella	C	0	0	0	0	0	0	0								0			
Psectrocladius	C	0	0	0	0											0			
Mesopsectrocladius	(	0	0	0	0					-									
Synorthocladius	(	0	0	0			-												
-	(	) 0	0																
Chironominae	(	0	0	0	0	0	0		) (	0	0	0	0	0	0	U			, 0

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	g4	g5	96	h1	h2	h3	i1	i2	i3	j1	j2	k1	k2	1.1	12	13	m1	m2	n1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	d
Chironomus	20	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Crytptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Einfeldia	20	0	0	0	0	0	20	60	20	300	180	0	0	220	280	0	120	180	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C.
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	10
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	20
Polypedilum/Pedionomus	20	20	0	40	0	140	40	20	0	0	0	0	0	0	20	0	100	140	9
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q
Tanytarsus	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	t
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	q
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	q
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	9

# TABLE A1: ABUNDANCE DATA (1969)

	σ4	a5	96	h1	h2	h3	i1	12	i3	j1	j2	k1	k2	11	12	13	m1	m2	n1
STATIONS:	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae																			

Tarrell Managemen	4320	2240	****	3360	36000	6020	8160	3680	5260	4840	4140	440	700	2400	2400	480	4660	2640	1700
Total Abdridance	13	7	6	6	8	11	10	8	8	7	5	4	2	3	7	2	14	14	10
	2.57	2.28	1.72	1.3	1.88	1.71	1.94	1.01	1.16	1.32	1.57	1.44	0.19	0.75	1.38	0.74	2.44	2.68	1.52
	0.69	0.81	0.67	0.5	0.63	0.49	0.58	0.34	0.39	0.47	0.68	0.72	0.19	0.48	0.49	0.74	0.64	0.7	0.46
Station Depth (m)	12.8	9.15	6.1	9.76	25.9	16.8	42.7	54.9	48.8	36.6	39.7	22.9	21.4	28.9	32.1	22.9	25	22.9	18.9

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	n2	n3	о1	02	о3	р1	p2	q1	q2	φ3	q4	q5	q6	r1	r2	г3	r4	r5	r6
TURBELLARIA																			
Tricladida																			
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. heringianus	0	40	60	60	0		1240	260	980	420	320		2360	0	0	0		2680	1400
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. pluriseta	.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. claparedianus	0	0	60	0	0	0	0	0	0	0	160	0	120	0	0	0	0	0	0
L. hoffmeisteri	120	120	60	60	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamothrix vejdovsky	0	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhyacodrilus sp.	0	0	900	940	0	860	120	0	0	0	0	0	0	0	0	0	0	0	0
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R. montana R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubifex ignotus	0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0_
T. tubifex	60	0	0	0	0	260	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
With hair setae	500	240	420	260	60	520	60	260	480	40	3140	4460	260	0	0	0	0	600	0
Without hair setae	60	120	60	0	460	80	0	0	0	0	0	500	0	0	0	0	0	300	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdella punctata	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

	n2	n3	01	02	о3	р1	p2	q1	q2	q3	<b>q</b> 4	q5	<b>q</b> 6	r1	r2	r3	г4	r5	r6	
STATIONS: Nephelopsis obscurus	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Retobbetta ti isei iatis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ISOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1307007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	100	40	260	1100	420	0	0	0	40	0	0	0	0	0	0	0	0	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	
	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pontoporeia hoyi	1020	1340	1920	1540	120	2100	400		3260			1020	2460	140	160			2760	2000	
	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Gammaridae	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0		20	
Gammarus pseudolimnaeus	100	100	320	40	80	200	0	0			80	40	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
Crangonyx gracilus	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
Talitridae	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
Hyalella azteca	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
HYDRACARINA	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0		0	
GASTROPODA	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	o	i.
Mark was Edward	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	
Valvatidae Valvata sincera sincera	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
vatvata ti icai iliata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Alleit Cota timoso	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physella •	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
· · · · · · · · · · · · · · · · · · ·	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A1: ABUNDANCE DATA (1969)

	n2	rЗ	01	02	03	р1	p2	q1	q2	<b>q</b> 3	q4	q5	q6	r1	r2	r3	r4	r5	r6
STATIONS: Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECIPOON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	180	160	120	80	60	60	580	80	0	140	60	0	0	0	0	0	160	160	40
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprider ran	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIT TENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	20	20	0	0	80	20	0	0	0	0	0	0	20	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia Sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	80	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	20	0
	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	, 0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0		0	0		0		-	0	-	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	n2	n3	01	02	03	p1	p2	q1	q2	<b>q</b> 3	94	<b>q</b> 5	q6	г1	г2	r3	г4	r5	г6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crytptochironomus fulvis	0	0	0	0	0	0	0	0	. 0	0	-	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0
Einfeldia	820	220	20	100	0	60	0	20	40	40	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	20	0	0	20	20	0	0	0	0	0	20	0	0 .
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	40	20	0	0	0	20	0	0	0	0	0	0	0	0
Phaenopsectra	280	0		240	80	140	20	0	0	20	20	0	0	0	0	20	20	0	0
Polypedilum/Pedionomus	20	60	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o~
Leptoceridae	n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ETCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rungitius pungitius	-		-	-															

TABLE A	11:	ABUNDANCE	DATA	(1969)
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	0	0	0	0	0	0	0	.0	0	U	U	0	0	U	0	U		U	U	'n
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
																	1 - 1 - 1 - 1 - 1 - 1 - 1			
Total Abundance	3260	2680	4000	3720	2180	5060	2560	5840	4780	4500	7440	6040	5240	140	160	340	4380	6520	3460	
Total # of Taxa	12	1 600	12	2.00		15			5				_	1	1	3	5	6	4	
Diversity Index	2.74	2.62	2.28	2.54	2.36	2.8	2.09	0.7	1.27	1.06	1.54	1.13	1.43	0	0	0.64	1.26	1.73	1.1	
Pielou's Evenness	0.76	0.73	0.64	0.71	0.68	0.72	0.66	0.3	0.55	0.34	0.49	0.49	0.62	0	0	0.4	0.54	0.67	0.55	
Station Depth (m)	21.4	23.5	19.8	19.2	17.1	18.3	6.1	33.9	32	32	30.2	27.5	19.2	0.61	1.22	13.7	45.8	61	71.7	

TABLE A1: ABUNDANCE DATA (1969)

TABLE ATT												.,	4	2	7	u4	u5	u6	v1	1
STATIONS:	s1	s2	s3	s4	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	u3	U4	u)	uo	*.	
TURBELLARIA																				
Tricladida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Dugesia tigrina	0	0	0	0	0	0	0	0	0 .	. 0	0	0	0	0	0	0	0	0		0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
e a serviciona	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		0
Lumbriculidae	60	20	0	480	3000	1620	0	0	20	80	600	120	40	0	0	0	0			0
S. heringianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
e area date	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Ilyodrilus templetoni	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0			0
Limnodrilus angustipennis	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0		-	0
L. claparedianus	0	0	20	480			0	0	40	20	. 0	20	0	0	0	0				0
L. hoffmeisteri	0	0	40	0			0	0	0	0	0	0	0	0	0	0				0
L. profundicola	0	0	0	0	-		0	0	0	0	0	0	0	0	0	0				0
L. udekemianus	0	0	0	0	-		0	0	0	0	0	0	0	0	0	0				0
Potamothrix vejdovsky	0	0	0	0	-		0	0	0	0	0	0	0	0	0	0	0			0
Rhyacodrilus sp.	0	0	0	0	_		0	0	0	0	0	0	0	0	0	0	0	0	į	0
R. caccineus	0	0	0	0	-		0	0	0	0	0	0	0	0	0	0	0	0	j	0
R. montana	-	0	0	-			0	0	0	0	0	0	0	0	0	0	0	0 0	J	0
R. sodalis	0		0				0	0	0	0	0	0	0	0	0	0	0	0 0	١	0
Spirosperma ferox	0	0		_			0	0	0	0			0	0	0	0	0	0 0	٥	0
Tasserkidrilus superiorensis	0	0	0					0	0	- 7			0	0	0	0	0	) (	0	0
T. kessleri	0	0	0				-	0	0	-			0	0	0	0	r	0 0	0	0
Tubifex ignotus	0	0	0					0	0	-			0	0	0			0 0	0	0-
T. tubifex	0	0	60					0	0				0	0	0			0 0	0	0
	0	0	0				_	0	80		7 20		0	0	0		) (	0 0	0	0
With hair setae	40		80					-	0					0	0	0	) 1	0 0	0	0
Without hair setae	0													0				0 0	0	0
	0													-				0 0	0	0
Enchytraeidae sp.1	0																		0	0
Enchytraeidae sp.2	0																		0	0
-	0													-			-		0	0
Naididae	0	0																	0	0
Stylaria lacustris	0	0			0 0	_											-	-	0	0
	0	0	0	0	0 0														0	0
HIRUDINEA	0	0	0	C	0 0												-	N-100	0	0
Binovinec	0	0	0	, ,	0 0	0 0													0	0
Erpobdellidae	0	0	0	(	0 0	0 0													0	0
Erpobdella punctata	0	0	0	, r	0 0	0 0	0	0	0	0	0 0	0 0	0	0	0	,	0	0	U	U
. Lipobacita p																				

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	s1	s2	s3	s4	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	u3	u4	u5	u6	v1
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nepreceptive constant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	0	0	0	0	0	.0	0	20	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	. 0	0	0	0	770	0 40	0	100	20	0	0 80
Pontoporeia hoyi	220	0	140		1740		0	40	220	480	1400	860	320	0	220	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
=	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPOON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

Chironominae

		- 7	s3	s4	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	uЗ	u4	u5	u6	v1	
STATIONS:	s1	s2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
£1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0	0	40	220	0	0	0	0	0	200	220	20	0	0	0	0	0	0	
Pisidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIFIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Monodiamesa tuberculata	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
V0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0~	
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
marcidus grp. subpilosus grp.	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobaenus pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
* ************************************	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			-	^			0	0			0	0	0	0		0			0	

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	s1	s2	s3	s4	s5	s6	t1	t2	t3	t4	t5 0	t6 0	u1 0	u2 0	u3 0	υ4 0	u5 0	u6 0	v1 0
	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	20	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crytptochironomus fulvis	0	0	0	0	0	0	0	-		٥	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0 .
(nigritula grp.)	0	0	0	20	0	0	0	0	0	0	20	0	0	0	0	0	0	20	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polypedilum/Pedionomus	0	0	40	100	0	0	0	0	140	0	0	0	0	0	0	0	0	0	0
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	20	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## TABLE A1: ABUNDANCE DATA (1969)

	s1	s2	s3	s4	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	u3	U4	u5	u6	v1
STATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Abundance	320	20	420	3600	4960	5700	0	60	540	600	2300	1260	400	40	220	120	20	160	80
	3	1	7	9	3	5	0	2	7	6	6	6	4	1	1	2	1	3	1
Total # of Taxa	1.2	0	2.56	2.77	1.17	1.28	0	0.92	2.25	0.98	1.5	1.42	1	0	0	0.65	0	0.59	0
Diversity Index	0.76	0	0.91	0.87	0.74	0.55	0						0.51	0	-	0.65		0.59	
Pielou's Evenness Station Depth (m)	2.44	3.05	10.4	25.9	45.8	68.6	2.44	5.49	13.1	15.3	36.6	67.1	2.44	6.1	13.7	18.3	18.3	24.4	1.83

TABLE A1: ABUNDANCE DATA (1969)

TURBELLARIA  Tricladida  Dugesta tigrina  Cura foremanii  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	STATIONS:	v2	v3	V4	v5	v6	v7	v8	<b>v</b> 9	v10	v11	w1	w2	w3	w4
Tricladida   Dugesia tigrina															
Tricladida   Dugesia tigrina	TURBELLARIA														
Dugesia tigrina															
Dugesia tigrina					0	0	0	0	0	n	0	n	0	0	0
Cura foremanii							-								
Clogochaeta	Cura foremanii	-			-				_				-		
Lumbriculidae S. heringianus O O O O O O O O O O O O O O O O O O O		100							-			-	-		
Lumbriculidae	OLOGOCHAETA	-			-	-			-		52.				
S. heringianus  0 0 0 240 0 0 0 20 0 20 0 20 0 20 0 0 0		_			-	-		-		-		-	-	-	0
Tubificidae  Autodrilus americanus  O O O O O O O O O O O O O O O O O O O										-			7	-	0
Tubificidae	S. heringianus			-			-						-	-	-
Auldorilus americanus  Auldorilus americanus  Auldorilus americanus  O			-					-	-	-		-		_	
A. pluriseta  A. pluriseta  Ilyodrilus templetoni  Limnodrilus angustipennis  O O O O O O O O O O O O O O O O O O O		-	-		-	1.75		_				190	-	0	0
Ilyodrilus templetoni		-		-					-					0	0
Limnodrilus templetoni  Limnodrilus angustipennis  O O O O O O O O O O O O O O O O O O O					_				_	-			-	0	0
L. claparedianus  L. hoffmeisteri  O O O O O O O O O O O O O O O O O O O		-				-			-	-	-			0	0
L. Abfmeisteri  L. profundicola  L. profundicola  L. udekemianus  O		-	-		_				-	-			0	0	0
L. profundicola L. udekemianus 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				1070		-				0	0		0	0	0
L. udekemianus  L. udekemianus  O O O O O O O O O O O O O O O O O O O		7						-		0	0	0	0	0	0
Potamothrix vejdovsky Rhyacodrilus sp. R. coccineus R. montana R. sodalis R.						-		-		0	0	0	0	0	0
Rhyacodrilus sp.  R. coccineus  R. montana  R. sodalis  Spirosperma ferox  Tasserkidrilus superiorensis  O O O O O O O O O O O O O O O O O O O		_			-	-		7	0	0	0	0	0	0	0
R. coccineus R. coccineus R. montana R. sodalis R. soda		-	-							0	0	0	0	0	0
R. montana  R. sodalis  O O O O O O O O O O O O O O O O O O O	20	-	-				-	0	0	0	0	0	0	0	0
R. montana R. sodalis		_			-		-		0	0	0	0	0	0	0
Spirosperma ferox         0		-	-		1.00				0	0	0	0	0	0	0
Tasserkidrilus superiorensis					-	0	0	0	0	0	0	0	0	0	0
T. kessleri T. kes								0	0	0	0	0	0	0	0
Tubifex ignotus  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-			0	0	0	0	0	0	0	0	0	0	0
T. tubifex					0	0	0	0	0	0	0	0	0	0	0
With hair setae	_				-	0	0	0	0	0	0	0	0	0	0
With hair setae         0	1. tubirex				0	0	0	0	0	0	0	0	0	0	0
Without hair setae	With hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.1		0	0	0	0	0	0	0	0	60	0	0	0	0	0
Enchytraeidae sp.1  Enchytraeidae sp.2  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WITHOUT HALL SCLOS		0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.2	Enchytraeidae sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naididae		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylaria lacustris	Enerty Cross Spire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylaria lacustris         0	Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIRUDINEA 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdettidae		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	w1	w2	w3	w4
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
neprice spare	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi	140	140	140	40	40	0	0	120	440	500	0	20	100	20
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	20	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0		0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alle i Cota timoso	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	v2	v3	V4	v5	v6	v7	v8	v9	v10	v11	w1	w2	w3	w4
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-,-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0
and orbiditions	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	.0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v	0	0	0	0	0	0	0	0	0	0	0	0	0	0
_ Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A1: ABUNDANCE DATA (1969)

OTATIONS.	v2	v3	v4	<b>v</b> 5	v6	v7	v8	v9	v10	v11	w1	w2	w3	w4
STATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	20	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0
Crytptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	0	20	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	40	0	0	0	0	0	0	60	20	0	0	0	0	0
Polypedilum/Pedionomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanytarsus		0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	-	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0		0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0		0	0	0	0
TRICHOPTERA	0	0		0	0	0	0	0	0		0	0	0	0
	0	0	0		0	0	0	0	0		0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0			0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0			0	0	0	0
Oecetis sp.	0	0	0	0		0		0			0	0	0	0
	0		0	0	0			0			0	0	0	0
Limnephilidae	0		0	0	0	0		0				0	0	
	0		0	0	0	0		0				0	0	
ODONATA	0		0	0	0	0		0			-	0	0	
	0		0	0	0	0						0		
Cordulegastridae	0		0		0	0		0						
Cordulegaster	0	0	0		0	0		0						
	0	0	0		0			0		0				
FISH	0	0	0		0					0				
	0	0	0		0					0 0		-		
Gasterosteidae	0	0								0 0				
Pungitius pungitius	0	0	0	0	0	0	0	(	): (	0 0	0	0	U	, 0

TABLE A1: ABUNDANCE DATA (1969)

STATIONS:	v2	v3	V4	v5	v6	v7	v8	v9	v10	v11	w1	₩2	₩3	₩4
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Abundance	180	160	140	280	40	0	20	220	540	520	20	20	100	20
Total # of Taxa	2	2	1	2	1	0	1	4	4	2	1	1	1	1
Diversity Index	0.94	0.54	0	0.59	0	0	0	1.62	0.95	0.24	0	0	0	0
Pielou's Evenness	0.94	0.54	0	0.59	0	0	0	0.91	0.47	0.24	0	0	0	0
Station Depth (m)	5.19	9.15	9.15	13.7	7.63	13.7	10.1	13.7	19.8	19.8	0.61	0.61	1.22	1.22

STATIONS:	a1	e1	e2	e3	e4	e5	e6	f1	f2	f3	f4	g1	g2	g3	94	g5	<b>g</b> 6	h1	h2	
TURBELLARIA																				
Tricladida														•			^			
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0	0	140	0	0	0	460	220	40	180		2700	140	760	440	
S. heringianus	40	0	0	0	480	820	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	-
Limnodrilus angustipennis	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	
L. claparedeanus	0	0	0	0	0	100	0	200	20	20	60	0	0	0	0	0	460	0	0	
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. profundicola L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. coccineus	0	0	0	0	0	200	40	0	0	0	0	0	0	20	0	280	0	0	0	
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tasserkidrilus kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. tubifex	20	0	60	0	0	0	0	380	40	60	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
With hair setae	0	180	80	0	0	1140	820	580	80	140	0	0	0	40	0	0	460	60	0	
Without hair setae	20	0	20	0	0	100	0	0	0	0	300	20	0	20	0	280	460	0	0	
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.1	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.2	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0		
Naididae	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0		
Stylaria lacustris	0	20	0	0	0		0	0	80 0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	-		
HIRUDINEA	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0		-	
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0			
Erpobdellidae	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0			
Erpobdella punctata	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		-		
Nephelopsis obscurus	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0		0	0	0	0	0	0	0	0	0					
Glossiphoniidae	0	0	0	0			0	0	0	0	0	0	0	0	0					
Helobdella triserialus	U	U	0	0	0		-	-		-				-						

Table A2: ABUNDANCE DATA: 1976 (no. m )

STATIONS:	a1	e1	e2	e3	e4	e5	<b>e</b> 6	f1	f2	f3	f4	g1	g2	g3	94	g5	g6	h1	h2
01711	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	0	0	0	0	120	120	0		140	20	20	120	20		1680	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPRITOGA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi	40	60	20	0	100	1260	1320	0	60	0	0	180	220	180	0	0	0	20	240
- Construction and an area of	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nibracatina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae Fossaria	0	0	0	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cymride o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
**************************************	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	20	0	0	0	80	240	0	0	0	0	0	0 60	0 180	0 40	20	20	080	20	40
Pisidium sp.	20	U	U	0	00	240	U	U	Ü	U	U	80	100	40	20	20	40	20	40

Table A2: ABUNDANCE DATA: 1976 (no. m )

	a1	e1	e2	e3	e4	e5	e6	f1	f2	f3	f4	g1	g2	g3	g4	g5	g6	h1	h2
STATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium amnicum	0	0	0	0	20	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0
Ablabesmyia Procladius	0	0	0	0	0	0	0	20	0	0	0	0	0	120	0	60	520	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intenemanningia	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	20	. 0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	20	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	20	0
Prodiamesa	0	20	0	0	0	0	0	80	60	0	0	0	0	0	0	0	0	0	0
Programesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
or thoctaor inac	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	200	200	0	0	0	0	0	560	100	0	40	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syrici the too to	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Citi orionimo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F 1 F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																			

Table A2: ABUNDANCE DATA: 1976 (no. m )

									1000	1.2	2.0			-		-			1.5	
STATIONS:	a1	e1	e2	e3	e4	e5	<b>e</b> 6	f1	f2	f3	f4	g1	g2	g3	94	<b>g</b> 5	g6	h1	h2	
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(nigritula grp.)	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	
Phaenopsectra	0	20	0	0	0	0	0	0	120	20	20	0	0	0	0	20	0	0	0	
Polypedilum/Pedionomus	0	100	0	0	0	180	0	120	20	20	40	20	40	60	0	0	40	20	0	
Stictochironomus	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanytarsus	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	
•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae (pupae)	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	e
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Special resources - Care S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500.0 - A.S.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Abundance	19	34	9	4	38	219	122	106	102	20	47	29	30	34	1	252	108	45	36	
Total # of Taxa	8	11	4	2	6	14	5	11	16	6	7	7	5	9	1	7	7	6	3	
Diversity Index	2.29	2.79	1.75	1	1.73	2.81	1.56	2.7	2.35	2.12	1.91	2.21	2.04	2.7	0	1.65	2.46	0.96	1.2	
Pielou's Evenness		0.81		1	0.67	0.74	0.67	0.78	0.59	0.82	0.68	0.79	0.88	0.85	0	0.59	0.88	0.37	0.75	
Station Depth (m)	5.5	5.5	10.9	14.6	25.6	45.5	47.3	6.4	5.5	7.3	7.3	14.6	16.4	9.1	11.9	10.9	7.3	15.5	22.8	
AND ADD AND ADD ADD ADD ADD ADD ADD ADD																				

Table A2: ABUNDANCE DATA: 1976

10010																				
STATIONS:	h3	i 1	12	i3	m1	m2	m3	n1	n2	n3	01	02	о3	p1	p2	р3	r1	Γ2	r3	
31811000																				
TURBELLARIA																				
Tricladida				0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
~	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	660	840	360	80	20	980	1400	280	740	0	0	0	80	0	0	480	0	0	0	
S. heringianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	160	0	20	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	
Ilyodrilus templetoni Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claparedeanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. hoffmeisteri	0	0	0	20	0	80	0	0	180	0	0	60	80	0	0	0	0	0	0	
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. coccineus	0	0	0	20	60	0	0	60	100	1000	260	20	0	420	500	0	0	0	0	
R. montana	0	0	0	0	0	0	0	0	0	160	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tasserkidrilus kessleri	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
<ol> <li>superiorensis</li> </ol>	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0	0	0	0	0	0		0	0	0	0	0	80	0	0	0	0	0	0	
T. tubifex	0	0	0	0	40	80		0	0	0	40	0	0	0	0	0	0	0		
	0	0	0	0	0	0		0	0	0	20	0	340	0	0	80	0	0	0	
With hair setae	0	60	360	220	80	720			0	160 340	20		1040	0	0	0	٥	0	0	
Without hair setae	0	0	120	0	0	0		40	0	0	0	0	0	0	0	0	0	0	-	
	0		0	0	0	0			0	0	0	0	0	0	0	0	0	0		
Enchytraeidae sp.1	0		0	0	0	0					0	0	0	0	0	0	0	0	0	i
Enchytraeidae sp.2	0		0	0	0	0				=7.	0	0	0	0	0	0	0	0	0	j
	0		0	0	0	0					0	0	0	0	0	0	0	0	0	)
Naididae	0		0	0	0	0		-			0	0	0	0	0		0	0	0	)
Stylaria lacustris	0		0	0	0	0					0	0	0	0	0	0	0	0	0	)
	0		0	0	0						0	0	0	0	0	0	0	0	0	)
HIRUDINEA	0		0	0	0						0	0	0	0	0	0	0	0		)
	0			0	0						0	0		0	0	0	0	0	) (	)
Erpobdellidae	0			0	0						0	0		0	0	0	0	0	) (	)
Erpobdella punctata	0			0	0						0	0		0	0	0	0	0	) (	)
Nephelopsis obscurus	0			0	0						0	0	0	0	0	0	0	0	) (	0
	0			0	0		0				0	0	0	0	0	0	0	0	) (	0
Glossiphoniidae	0			0	0		0 0				0	0	0	0	0	0	0	0	) (	0
Helobdella triserialus	Ü						,													

Table A2: ABUNDANCE DATA: 1976

STATIONS:	h3	i1	í2	i3	m1	m2	m3	n1	n2	n3	01	02	03	p1	p2	р3	r1	r2	r3	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ISOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	770	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	60	0	0	0	20	0	0	260	120	80	720 0	1220	180	200	40	0	0	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	100	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	340	1500	1860		1540	-	1200	440	660	600	300	20	760	820	200	0	40	80	
Pontoporeia hoyi	240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammarus pseudolimnaeus	0	0	0	0	0	0	20	0	40	20	0	0	0	0	60	0	0	0	0	
dama da para a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae '	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
were and do a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvatidae Valvata sincera sincera	0	0	0	0	0	80	0	0	20	60	0	0	40	0	0	0	0	0	0	
Valvata tricarinata	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
vatvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	u
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DELEGYDODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pisidium sp.	100	140	0	60	220	600	60	200	300	460	220	60	860	40	0	0	0	0	0	
A CONTRACTOR OF THE CONTRACTOR																				

Table A2: ABUNDANCE DATA: 1976

STATIONS:	h3	11	12	i3	m1	m2	m3	n1	n2	n3	01	02	03	p1	p2	p3	r1	r2	r3
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	20	0	0	0	0	0	0	40	20	60	0	0	20	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	140	140	40	40	20	0	0	0
Procladius	0	20	20	0	20	20	0	60	40	80 0	20	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0		20	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	. 0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	20	0	0	0	20	0	0	0	0	0	20	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
~ ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp. Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	20	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0
marcidus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syrior thousands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cittonomina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
= M																			

Table A2: ABUNDANCE DATA: 1976

STATIONS:	h3	i 1	i2	i3	m1	m2	m3	n1	n2	n3	01	02	03	р1	p2	рЗ	r1	г2	r3
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	60	20	0	20	20	40	20	0	0	220	0	0	0	0	0
Polypedilum/Pedionomus	60	140	60	0	0	20	0	0	180	260	80	960	1240	60	600	160	0	0	20
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Family idea	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephitidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OUGNATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordutegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	Ü												-	_					
Total Abundance	55	85	121	116	77	208	99	104	119	181	70	118	266	87	111	50	0	2	6
Total # of Taxa	6		7	8		11	4	10	14		12		13	8	6	7	0	1	3
Diversity Index			1.65	1.16	1.86	2.34	1.08	2.1	2.9	3.21	2.54	2.25	2.8	2.2	2.08	2.1	0	0	1.25
Pielou's Evenness			0.59														0	0	0.79
Station Depth (m)																10	3.6	3.6	9.1
Station bepth (m)	-0.0							7.0											

Table A2 - ARUND	ANCE	DATA:	1976
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10000																				
STATIONS:	r4	r5	s1	s2	s3	t1	t2	t3	u1	u2	uЗ	4	ഹ	v1	v2	<b>v</b> 3	V4	v5	<b>v</b> 6	
SIATIONS.																				
TURBELLARIA																				
Tricladida																		•	•	
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S. heringianus	140	420	20	0	0	0	0	0	0	0	0	0	440	0	0	0	0	0	60	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claparedeanus	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	
L. profundicola	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. coccineus	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tasserkidrilus kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. superiorensis	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. tubifex	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12 15 16 16 16	_		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
With hair setae	20		0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	~
Without hair setae	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.1	0		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.2	0		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	į.
0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	0		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	6
Naididae Stylaria lacustris	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Stylaria tacustris	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Į.
HIRUDINEA	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Į.
HIKUDINEA	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Erpobdellidae	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	)
Erpobdella punctata	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	)
Nephelopsis obscurus	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	j
Replietops 13 doses 45	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	)
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			-
Helobdella triserialus	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	) (	)
**************************************																				

Table A2: ABUNDANCE DATA: 1976

CTATIONS.	г4	r5	s1	s2	s3	t1	t2	t3	u1	u2	u3	u4	ഥ്	v1	v2	v3	v4	v5	v6	
STATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
I SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	740	20	0	20	0	0	40	0	0	20	580	80	20	140	140	40	20	0	
Pontoporeia hoyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
dunia. do poede de la companya de la	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ä
V	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	-0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvatidae Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
vatvata ti icai mata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
receiroux .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pisidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table A2: ABUNDANCE DATA: 1976

STATIONS:	r4	r5	s1	s2	s3	t1	t2	t3	u1	u2	uЗ	υ4	u5	v1	v2	v3	v4	v5	v6
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaer ruii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIFIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	20	0	0	0	0	0	0	40	0	0	0	40	0	0	0
Monodiamesa tuberculata	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
V. S. A. W.	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0			0	0	0	0	20	0	0	0	0	0	0	0
marcidus grp.	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0		-	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
Paracladius	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	, 0		-	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0		_		0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-			
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	20	40	0	0	0	0	0	0	0	0	0	0	60	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table A2: ABUNDANCE DATA: 1976

STATIONS:	r4	r5	s1	s2	s3	t1	t2	t3	u1	u2	uЗ	<b>u</b> 4	u5	v1	v2	v3	v4	v5	v6
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	0	0	20	0	0	0	20	0	0	0	0	0	20	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polypedilum/Pedionomus	0	20	0	0	0	0	20	0	0	0	0	20	0	0	0	0	20	0	0
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanytarsus	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1017 101 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sittle of the same	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
oc. ocopos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.101.01.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-7 0 - 5 0 F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200 A.O. A. B. C. C.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Abundance	8	61	3	1	6	1	2	2	0	1	1	38	27	1	7		3	1	3
Total # of Taxa	2	5	-3	1	4	1	2	1	0	1	1	6	3	1.	1	_	2	1	1
Diversity Index	0.54	1.26	1.5	0	1.92	0	1	0	0	0		1.28		0		1.38		0	0
Pielou's Evenness	0.54		1		0.96	0	1	0	0	0		0.49		0		0.87		0	0
Station Depth (m)	45.5	58.2	2.7	4.5	7.3	2.7			2.7	5.5	10.9	11.9	12.8	5.5	9.1	12.8	11.9	11.9	12.5

Table A2: ABUNDANCE DATA: 1976

	v7	v8	v9	v10	v11
STATIONS:	¥1	***			
TURBELLARIA					
Tricladida			_	0	0
Dugesia tigrina	0	0	0	0	
Cura foremanii	0	0	0	0	0
	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0
	0	0	0	0	0
Lumbriculidae	0	0	0	0	0
S. heringianus	0	0	0	0	-
	0	0	0	0	0
Tubificidae	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0
A. pluriseta	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0
L. claparedeanus	0	0	0	0	
L. hoffmeisteri	0	0	0	0	0
L. profundicola	0	0	0	0	0
L. udekemianus	0	0	0	0	0
Potamothrix vejdovsky	0	0	0	0	0
Rhyacodrilus sp.	0	0	0	0	. 0
R. coccineus	0	0	0		-
R. montana	0	0	0	2	
R. sodalis	0	0	0	-	_
Spirosperma ferox	0	0	0		
Tasserkidrilus kessleri	0	0	0		
T. superiorensis	0	0	0		
Tubifex ignotus	0	0	0		
T. tubifex	0	0	0		
	0	0	0		-
With hair setae	0	0	0		_
Without hair setae	0	0	(		
	0	0	(		
Enchytraeidae sp.1	0		(		
Enchytraeidae sp.2	0				0
	0				0 0
Naididae	0			<del>-</del> 1	0 0
Stylaria lacustris	0				0 0
	0			-	0 0
HIRUDINEA	0			_	0 0
	0				0 0
Erpobdellidae	C	0		_	0 0
Erpobdella punctata	0			-	0 0
Nephelopsis obscurus	(			-	0 0
**	(			_	0 0
Glossiphoniidae		) 0		-	0 0
Helobdella triserialus	(	0	)	0	0 0

Table A2: ABUNDANCE DATA: 1976

STATIONS:	v7	v8		v10	v11
	0	0	0	0	0
ISOPODA	0	0	0	0	0
	0	0	0	0	0
Asellidae	0	0		0	0
Caecidotea racovitzai	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0
	0	0	0	0	0
MYSIDACEA	. 0	0	0	0	0
	0	0	0	0	0
Mysis relicta	0	0	0	0	0
AMOUTBOOA	0	0	0	0	0
AMPHIPODA	0	0	0	0	0
Haustoriidae	0	0	0	0	0
Pontoporeia hoyi	0	0	0	0	0
Pontoporera noyi	0	0	0	0	0
Gammaridae	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0
dalitial us pseudot metaess	0	0	0	0	0
Crangonyctidae	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0
Crangeryn 3. acres	0	0	0	0	0
Talitridae	0	0	0	0	0
Hyalella azteca	0	0	0	0	0
.,	0	0	0	0	0
HYDRACARINA	0	0	0	0	0
	0	0	0	0	0
GASTROPODA	0	0	0	0	0
	0	0	0	0	0
Valvatidae	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0
	0	0	0	0	0
Hydrobiidae	0	0	0	0	0
Amnicola limosa	0	0	0	0	0
	0	0	0	0	0
Lymnaeidae	0	0	0	0	0
Fossaria	0	0	0	0	0
Lymnaea	0	0	0	0	0
	0	0	0	0	0
Physidae	0	0	0	0	0
Physella	0	0	0	0	0
	0	0	0	0	0
Planorbidae	0	0	0	0	0
Gyraulus	0	0	0	0	
Helisoma	0	0	0	0	0
	0	0	0	0	0
PELECYPODA	0	0	0	.0	.0
w. b. a a dd da a	0	0	0	0	0
Sphaeriidae	0	0	0	0	0
Pisidium sp.	U	U	U	v	U

Table A2: ABUNDANCE DATA: 1976

STATIONS:	v7	v8	v9	v10	v11
Pisidium amnicum	0	0	0	0	0
Sphaerium	0	0	0	0	0
	0	0	0	0	0
DIPTERA	0	0	0	0	0
	0	0	0	0	0
Chironomidae	0	0	0	0	0
	0	0	0	0	0
Tanypodinae	0	0	0	0	0
Ablabesmyia	0	0	0	0	0
Procladius	0	0	0	0	0
Thienemannimyia	0	0	0	0	0
	0	0	0	0	0
Diamesinae	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0
Potthastia	0	0	0	0	0
longimanus grp.	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0
	0	0	0	0	0
Prodiamesinae	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0
Prodiamesa	0	0	0	0	0
	0	0	0	0	0
Orthocladiinae	0	0	0	0	0
	0	0	0	0	0
Brillia	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	
Cricotopus sp.	0	0	0	20	0
Heterotrissocladius	0	0	0	0	0
marcidus grp.	0	0	0	0	0
subpilosus grp.	0	0	0	0	0
Hydrobaenus	0	0	0	0	0
pilipes grp.	0	0	0	0	0
Orthocladius	-	0	0	0	0
Paracladius	0	0	0	0	0
Parakieferiella	0	-	100	0	0
Psectrocladius	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0
Synorthocladius	0	0	0	0	0
	0	0	0	0	0
Chironominae	0	0	0	0	0
	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0
Chironomus	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0
(mancus grp.)	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0
Cryptotendipes	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0
Dicrotendipes	0	0	0	0	0
Einfeldia	0	0	0	0	0
Lipiniella	U		0		~

Table A2: ABUNDANCE DATA: 1976

STATIONS:	v7	v8	v9	v10	v11
Microtendipes	0	0	0	0	0
pedellus grp.	0	0	0	0	0
Parachironomus	0	0	0	0	0
arcuata grp.	0	0	0	0	0
Paraclodopelma	0	0	0	0	0
(nigritula grp.)	0	0	0	0	0
Paralauterborniella	0	0	0	0	0
Paratanytarsus	0	0	0	0	0
Paratendipes	0	0	0	0	0
Phaenopsectra	0	0	0	0	0
Polypedilum/Pedionomus	0	0	0	0	0
Stictochironomus	0	0	0		0
Tanytarsus	0	0	0		0
	0	0	0		0
Chironomidae (pupae)	0	0	0		0
	0	0	0	-	0
Ceratopogonidae	0	0	0	0	0
	0	0	0	0	0
Empididae	0	0	0	0	0
	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0
***	0	0	0	0	0
Leptoceridae	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0
Oecetis sp.	0	0	0	0	0
Kinnahilidaa	0	0	0	0	0
Limnephilidae	0	0	0	0	0
ODONATA	0	0	0	0	0
ODONATA	0	0	0	0	0
Cordulegastridae	0	0	0	0	0
Cordulegaster	0	0	0	0	0
cordategaster	0	0	0	0	0
FISH	0	0	0	0	0
1130	0	0	0	0	0
Gasterosteídae	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0
	0	0	0	0	0
Cottidae	0	0	0	0	0
Total Abundance	0	0	0	1	0
Total # of Taxa	0	0	0	1	0
Diversity Index	0	0	0	0	0
Pielou's Evenness	0	0	0	0	0
Station Depth (m)	9.1	10.9	9.1	11.9	16.4

TABLE	A3:	ABUNDANCE	DATA	(1977/1978)
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TABLE A3: ABUNDANCE DATA (1977/1978	8)																			
(no. m )												- 2	c3	c4	c5	<b>c</b> 6	c7	c8	-0	
STATIONS:	a1	a2	<b>a</b> 3	a4	Ь1	b2	b3	Ь4	<b>b</b> 5	b6	c1	c2	C3	C4	60	CO	CI	78	c9 78	
			78	78			78											10	10	
TURBELLARIA																				
Tricladida					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremani	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	280	40	0	0		3360	120	20	0	0	460	0	0	0	40	
Stylodrilus heringianus	0	20	40	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claperedianus	0	0	0	0	0	0	20	120	0	0	0	0	0	0	0	0	0	200	0	
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. udekemianus	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	20	0	0	0	0	0	0	0	0	0	0	260	140	0	1660	300	
Rhyacodrilus sp.	0	20	0	0	0	0	0	0	120	0	0	0	0	0	0	0	1680	0	0	
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	240~	je,
T. tubifex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Web between	0	0	0	20	0	0	160	0	0	0	0	0	0	0	60	0	0	0	100	
With hair setae Without hair setae	0	0	0	0	0	0	0	20	0	0	0	0	20	0	0	0	0	0	0	
Without hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sub-servides on 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HIDIDINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdellidae	0	0	0	0	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
El bopaerra ballerara	~																			

TABLE A3: ABUNDANCE DATA (1977/1978)

TABLE AS. ABORDANCE DATA (1717)																				
(no. m )		- 2	. 7	-/	L4	b2	b3	b4	b5	b6	c1	c2	<b>c</b> 3	c4	c5	c6	c7	c8	c9	
STATIONS:	a1	a2	a3 78	a4 78	Ь1	DZ	78	D4	0.0	50	CI	CZ	63	-	CJ	CO	CI	78	78	
44 A A 14 (4.00 mov)		0	0	0	0	0	60	0	40	0	0	0	0	0	0	0	20	0	0	
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae Helobdella triserialus	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	
Hetopoetta triseriatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ISOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1305004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	0	0	20	0	0	540	260	20	20	0	0	0	0	0	40	40	20	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	40	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pontoporeia hoyi	0	0	220	80	20	40	0	60	580	200	0	0	0	60	100	800	480	800	640	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	40	20	20	
Gammarus pseudolimnaeus	0	0	0	320	0	0	180	120	120	20	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0	
HIDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o~	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvata sincera sincera	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	80	60	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE	A3:	ABUNDANCE	DATA	(1977/1978)
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(no. m )	,																_	_	
STATIONS:	a1	a2	a3	a4	ь1	b2	b3	Ь4	b5	b6	c1	c2	c3	c4	c5	c6	c7	c8	c9
STATIONS.			78	78			78								_			78	78
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	20	0	40	20
Pisidium	0	0	0	60	0	0	40	140	0	60	0	0	0	0	0	0	0	0	0
P. amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	140	120
Sphaerium	0	0	0	0	0	20	0	0	60	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	40	60	40	140	0	0	0	0	20	180	40	40	40
Procladius	0	0	20	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20	20	20
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	20	0	0	60	0	0	0	20	0	20	40	40	60	0	0	0	0
Monodiamesa tuberculata	0	0	0	40	20	0	0	0	0	0	0	0	0	0	0	0	20	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n=11112=	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	۵
Brillia Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
marcidus grp.	0	0	120	20	0	0	120	0	0		20	20		0	80	40	20		60
subpilosus grp.	0	0	0	0	0	0	0	0	0		0	0		0		0	0		
Hydrobaenus	0	0	0	0	0	0	0	0	0		0	0		0		0	0		
pilipes grp.	0	0	0	0	0	0	0	0	0		0	0		0			0		
Orthocladius	0	0	0	0	0	0	0	0	0		0	0					0		
Paracladius	0	0	0	0	0	0	0	0	0		20						0		
Parakieferiella	0	0	0	0	0	0	0				0						0		
Psectrocladius	0	0	0	0	0		0				0								
Mesopsectrocladius	0	0	0	0	20		0				20							_	
Synorthocladius	0	0	0	0			20				0								
₹ # 0 850 ° d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		, ,	, 0

TABLE A3: ABUNDANCE DATA (1977/1978)

TABLE AS: ABONDANCE DATA CONTACT																			
(no. m )			~	- /	L4	b2	b3	64	b5	b6	c1	c2	c3	c4	c5	c6	c7	c8	c9
STATIONS:	a1	a2	a3	a4	b1	טב	78		00				-	-	-			78	78
			78	78		^		0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	200	0	0	0		0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	lui					0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lipiniella	0	20	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	20	0	40	0	0	40	0	0	0	0	0	20	40	0	40	0	0	0	40
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	100	0	0	40	180	0	40	0	0	40	40	20	420	140	40	0
Polypedilum/Pedionomus	0	0	0	40	20	0	220	100	0	0	0	20	20	0	40	660	60	120	0
Stictochironomus	20	0	0	0	20	20	0	0	0	0	0	0	0	20	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	20	0	60	180	0	0	0	0	0	0	20	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	20	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE	A7.	ARINDANCE	DATA	(1977/1978
TARIF	43.	ARUNDANCE	DAIA	(17/1/17/0

TABLE AST THE																			
(no. m )	a1	a2	a3 78	a4 78	ь1	ь2	ь3 78	Ь4	b5	b6	c1	c2	c3	c4	c5	<b>c</b> 6	<b>c</b> 7	c8 78	c9 78
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Abundance	60	140	460	920	400	240	1480	1260	1100	4220	200	140	180	160	1320	2400	2580	3400	1740
Total Abundance	3		6	13	7	7	10	10	11	12	5	6	6	4	14	10	12	14	14
Total # Taxa	-		2.02	2.99	1.66	2.69	2.9	3.09	2.41	1.32	0.000		2.5		_			2.37	
Diversity Index	1	0.83	0.78	0.81	0.59	0.96	0.78	0.93	0.7	0.37	0.76	0.98	0.97	0.95	0.79	0.75	0.49	0.62	0.77
Pielou's Evenness Station Depth (m)	4.5					5.5				6.4		9.1	7.3	5.5	4.5	15.5	21	21	21

	TABLE A3: ABUNDANCE DATA (1977/1978																			
	(no. m )		-12		-17	d5	d6	ď7	d8	e1	e2	<b>e</b> 3	e4	e5	e6	e7	<b>e</b> 8	e9	e10	f1
	STATIONS:	d1	d2	d3	d4	as	GO	a,	GO	eı	- 62	63	64	63	-	78	78	78	78	*.*
	***************************************																			
	TURBELLARIA																			
	Tricladida																			
	Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cura foremani	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	out a volument	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Stylodrilus heringianus	0	20	60	240	400	280	1020	1240	20	20	140	140	420	360	200	420	120	800	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	L. claperedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	L. profundicola	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
	Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rhyacodrilus sp.	0	0	0	0	40	240	0	0	0	0	0	0	0	0	0	160	0	0	0
	R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Spirosperma ferox	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	20	0
	Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	T. tubifex	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	With hair setae	0	0	0	20	20	60	220	120	0	0	0	0	0	20	120	40	0	0	0
	Without hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	<u>.</u>	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0	0	0	0	0	0
	HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE	A3:	ABUNDANCE	DATA	(1977/1978
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TABLE AS. ABORDANCE																				
(no. m )	d1	d2	d3	d4	d5	d6	ď7	d8	e1	e2	e3	e4	e5	e6	e7	e8	e9	e10	f1	
STATIONS:	ui	U.	0.5	•	-										78	78	78	78		
Nephelopsis obscurus	0	0	0	0	0	20	0	0	0	0	0	0	0	40	0	0	0	0	0	
Nephetops is obscures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helobdella triserialus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
netobactia ti iati iati	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
I SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1001 001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	0	0	0	940	40	0	0	0	0	0	0	0	0	20	0	0	0	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	0	0	0	0	20	20	0	20	0	0	20	40	0	60	20	08	20	40	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	0	0	0	0	1120		620	180	80	160	160	280	640		1280		640	20	
Pontoporeia hoyi	0	0	400	40	580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0 20	0	700	120	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
w. http://dea	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	20	0	20	0	0	40	0	0	0	0	0	0	0	0	20	0	20	0	0	
HIDRACANIAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
gag the sea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvata sincera sincera	0	0	0	0	0	120	20	0	0	0	0	0	0	20	0	0	40	80	0	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0	0	
Fossaria	0	0	0	0	0	20		0	0	0	0	0	0	0	0		0	0	0	
Lymnaea	0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0	0	
	0	0	0	0	0	0		0	0	0	0	0	0	0	0		0	0	0	
Physidae	0	0	0	0	0			0	0	0	0	0	0	0	0		0	0	0	
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	U	U	U	U	U	U	

TABLE A3: ABUNDANCE DATA (1977/1978 (no. m )

TABLE AS: ABUNDANCE DATA (1777)																			
(no. m )			_					10			. 7	-/	- F	- (	-7	e8	e9	e10	61
STATIONS:	d1	d2	d3	d4	d5	d6	d7	d8	e1	e2	<b>e</b> 3	e4	e5	<b>e</b> 6	e7				f1
														0	78	78	78	78	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium	0	0	0	0	0	120	220	280	0	0	0	0	60	0	80	40	80	0	140
P. amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	20	0	0	0	0	0	0	0	20	0	20	20	20	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	40	0	0	20	20	100	0	20	0	0	0	0	0	0	0	20	20	0	40
Thienemannimyia	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	20	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Protanypus sp. A	0	0	0	0	0	20	20	40	0	0	0	0	0	0	0	20	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	40	20	20	0	0	20	20	0	20	40	0	20	20	20	0	0	20	20
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	40	0	20	40	80	420	0	40	0	0	0	0	0	0	240	0	20	40	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A3: ABUNDANCE DATA (1977/1978

TABLE AS: ABONDANCE DATA CTATA																				
(no. m )	-10	-12		d4	d5	d6	d7	d8	e1	e2	e3	e4	e5	e6	e7	e8	e9	e10	f1	
STATIONS:	d1	d2	d3	04	65	uo	u,	00	-		-				78	78	78	78		
					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironominae	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
Chernovskiia orbicus	0	0	0	0	0	0	0	0		-	0	0	0	0	0	0	0	0	0	
Chironomus	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(mancus grp.)	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0		0				0	
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paracladopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(nigritula grp.)	0	40	20	0	0	0	0	20	20	0	0	20	40	0	20	0	0	0	20	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phaenopsectra	0	0	0	0	40	60	0	0	0	0	0	0	0	0	0	0	0	0	0	
Polypedilum/Pedionomus	0	0	0	20	300	0	40	0	160	0	0	0	60	0	0	0	20	40	880	
Stictochironomus	0	G	0	0	0	200	0	0	20	0	0	0	0	100	0	0	0	0	20	
Tanytarsus	0	0	0	0	0	140	0	820	0	0	0	0	0	0	20	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ceratopogonidae	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Emproves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
The state of the s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
occers sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limepartione	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
COCHATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sandal constraides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ė
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	į
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	j
FISH	U	U	U				-		-	-	-	-					. +0			

				and the same of	2 2 20 2
TARLE	43.	ABUNDANCE	DATA	(1977/	1978

(no. m )	d1	d2	ď3	d4	ď5	d6	d7	d8	e1	e2	<b>e</b> 3	e4	e5	e6	e7 78	e8 78	e9 78	e10 78	· f1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Abundance	140	120	560	400	3140	3220	4180	3220	440	120	340	340	920	1220	1460	2060	1560	1700	1420
Total # Taxa	4	4	7	7	11	22	9	10	7	3	3	4	6	8	11	11	10	10	
Diversity Index	1.95	1.92	1.55	1.97	2.59	3.37													
Pielou's Evenness		0.96			0.75									0.62				0.57	
Station Depth (m)	9.1	11.9	14.6	13.7	14.6	3.6	25.6	25.6	9.1	12.8	14.6	16.4	18.3	18.3	28	34	32		6.4

TABLE A3: ABUNDANCE DATA (1977/1978																				
STATIONS:	f2	f3	f4	f5	f6	f7	g3	g4	g5	g6	g7	<b>g</b> 8	g9	g10	g11	g12	g13	h3	h4	
TURBELLARIA																				
Tricladida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dugesia tigrina	-			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremani	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OTOGOCIAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stylodrilus heringianus	0	20	0			900	0	0	180	2160	360	320	280	60	20	20	640	. 0	400	
	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0	
A. pluriseta	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claperedianus	0	0	0	20	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	
L. hoffmeisteri	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	400	260	40	40	80	40	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	
R. coccineus	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0	0	0	٥	0	0	0	0	0	0	0	140	20	20	80	0	0	0	0	
T. tubifex	0	60	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	60	200	120	20	120	140	0	0	0	
With hair setae	0	80	0	-	0	0	0	0	0	120	60	0	0	0	0	0	0	0	0	
Without hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdellidae	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdella punctata	U	U		0	9	-			-	-	-	-				_	30		-	

TABLE A3: ABUNDANCE DATA (1977/1978

TABLE A3: ABUNDANCE DATA (1977/1976																				
(no. m )				f5	f6	f7	g3	g4	g5	g6	g7	g8	99	g10	g11	g12	g13	h3	h4	
STATIONS:	f2	f3	f4	13	,0	1.4	97	37	3-	30	91	3-								
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0		0	0	60	0	0	0	120	40	120	80	100	0	80	0	0	20	
Pisidium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P. amnicum	0	0	0	0	220	40	0	0	0	0	80	20	60	0	100	0	0	0	0	
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ablabesmyia	0	0	0	0	20	20	20	0	20	20	60	0	0	0	0	0	20	40	60	
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diamesinae	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	
Pagastia sp. A	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
longimanus grp.	0	0		0	20	0	0	0	0	0	0	0	0	40	0	0	0	0	0	
Protanypus sp. A	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesinae	0	0	0			20	0	0	0	0	0	0	0	0	0	0	0	0	20	
Monodiamesa tuberculata	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesa	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus (Isocladius)	0	0	0	0	0	0	0	120	0	0	0	0	0	0			0	0	0	
Cricotopus sp.	0	0	0		0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	
Heterotrissocladius	0	0	0	0	0	80	0	0	0	0	0	0	40	0			0	0	0	
marcidus grp.	0	0	0	0		0	0	0	0	0	0	0	0	0			20	0	0	
subpilosus grp.	0	0	0	0	0		_		0	0	0	0	0	0			0	0	0	
Hydrobaenus	0	0	0	0	0	0	0	0	-	0	0	0	0	0			0	0	0	
pilipes grp.	0	0	0	0	0	0	0	0	0		-		0	0	-		0	0	0	
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0		0				0	0	
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0		
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0		
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0		_			0		
Mesopsectrocladius	0	0	0	0	0	0	0	20	0	0	0	0	0	0				0		
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	U	

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TABLE	47.	ARHADANCE	DATA	(1977/1978

(no. m )	f2	f3	f4	f5	f6	f7	g3	g4	g5	g6	g7	g8	g9	g10	g11	g12	g13	h3	h4
Gasterosteidae Pungitius pungitius Cottidae	0 0 0 0		0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0
Total Abundance Total # Taxa Diversity Index Pielou's Evenness Station Depth (m)	0	280 6 2.41 0.93 16.4	0	4 1.09 0.55	7 1.54 0.55	0.65	1	3 1.06 0.67	3 1.25 0.79	3380 6 1.36 0.53 31.1	13 2.38 0.64	10 2.62 0.79	10 1.89 0.57	10 1.35 0.41	8 1.67	0.62	7 1.47 0.52	0.96	

TABLE A3: ABUNDANCE DATA (1977/1978 (no. m) i7 i9 i10 i11 112 h8 h9 h10 i3 h5 h6 h7 STATIONS: \_\_\_\_\_ TURBELLARIA Tricladida n Dugesia tigrina n Cura foremani n n n n n DLOGOCHAETA n n n n n n Lumbriculidae 420 1540 0 2300 1600 1940 Stylodrilus heringianus n n Ω n Tubificidae Aulodrilus americanus n n n A. pluriseta n Ilyodrilus templetoni n n n n Limnodrilus angustipennis L. claperedianus n 0 17220 n L. hoffmeisteri L. udekemianus L. profundicola n Potamothrix vejdovsky Rhyacodrilus sp. R. coccineus n n n R. montana n R. sodalis n n n n Spirosperma ferox n Tasserkidrilus superiorensis T. kessleri Tubifex ignotus n n T. tubifex D 

With hair setae 0 13780 Without hair setae n n Enchytraeidae sp.1 Enchytraeidae sp.2 n n n D n Naididae Stylaria lacustris HIRUDINEA n n n n n Erpobdellidae O Erpobdella punctata

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TABLE A3: ABUNDANCE DATA (1977/1978																	
(no. m )																	
STATIONS:	h5	h6	h7	h8	h9	h10	i3	14	i5	16	i7	i8	19	i 10	i11	112	j 1
210110001	78	78	78	78	78	78											
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027 0 200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium	140	240	500	360	80	0	140	560	260	0	0	580	140	140	0	0	0
P. amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	20	0	0	0	280	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
m - 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	40	20	20	20	0	0	60	140	460	160	0	40	0	20	0	0	20
Thienemannimyia	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	100	0	40	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	20	0	0	20	0	0	0	20	0	0	0	0	0	0	0	0	
Prodiamesa	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	- 0	_			_
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	20	0	20	0	20	20	0	0	100	0	20			0	240	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Parakieferiella

Psectrocladius

Synorthocladius

Mesopsectrocladius

Orthocladius

Paracladius

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LE A3: ABUNDANCE DATA (1977/1978																	
(no. m )															: 4 4	447	1.4
TIONS:	h5	h6	h7	h8	h9	h10	13	14	15	16	i7	18	19	i10	111	112	j1
	78	78	78	78	78	78									0	0	0
ephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 7	0	0
ossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
elobdella triserialus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	, 0	0	0	0	0	0	0	0	0	0	0	0	0	0
ellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
aecidotea racovitzai	0	0	100	0	0	0	20	140	0	0	0	0	0	0	0	0	0
irceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ysis relicta	0	0	20	0	0	40	0	0	0	60	20	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ustoriidae	0	0	0	0	1600	320	0	20	320	0	-	-		2140		0	0
ontoporeia hoyi	880	1600	880	1060	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mmaridae	0	0	40	20	0	0	0	0	0	0	0	0	0	0	0	0	0
ammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
angonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
rangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Destales	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
litridae	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
yalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RACARINA	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0
KACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IKOPOOK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
lvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
alvata sincera sincera	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0
alvata tricarinata	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
mnaeidae	0	.0	0	0	0	0	0	0	0	0	0	0					0
ossaria	0		0	0	0	0	0	0	0	0	0	0					0
утпаеа	0		0	0	0	0	0	0	0	0	0	0					0
	0		0	0	0	0	0	0	0	0	0	0					0
ysidae	0	0	0	0	0	0	0	0	0	0	0	0				0	0
at the state of th	0		- 0	0	0	()	0	0	0	-0	0	0	0		u	U	0

TABLE A3: ABUNDANCE DATA (1977/1978

TABLE AJ. ADOITOTATE																		
(no. m )	h5	h6	h7	h8	h9	h10	i3	14	i5	16	i7	i8	i9	i10	i11	112	j1	
STATIONS:	78	78	78	78	78	78												
one •	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .	0	
tiibious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chernovskiia orbicus	0	20	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dicrotendipes	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0	0	0	
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paracladopelma	20	0	20	20	0	0	0	0	20	20	60	0	0	40	0	0	0	
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	
Phaenopsectra	40	40	120	20	0	20	40	20	60	20	0	20	0	20	0	0	0	
Polypedilum/Pedionomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stictochironomus	0	0	20	0	0	20	0	0	0	0	0	20	0	20	0	0	0	
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis Sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Decetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnephitidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	C	0	0	0	0	0	0	0	0	0		0	0	
ATAMOOO	0	0	0	0	C	0	0	0	0	0	0	0	0	0		0	0	
Cordulegastridae	0			0	C	0	0	0	0	0	0	0	0			0	0	
Cordulegaster	0			0	C	0	0	0	0	0	0	0	0	) (	) (	0	0	
Cordutegaster	0		0	0	0	0	0	0	0	0	0	0	C	) (	) (	) 0	0	
FISH	0	0	0	0		0	0	0	0	0	0	0	(	) (	) (	0	0	
L 1 2 L																		

ABLE A3: ABUNDANCE DATA (1977/1978

(no. m )																	
TATIONS:	h5	h6	h7	h8	h9	h10	13	i4	i5	16	17	18	i9	i 10	i11	112	j 1
	78	78	78	78	78	78											
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
otal Abundance	2900	4380	2660	3060	3180	740	580	51120	4260	320	1260	2200	3520	3540	1940	0	180

Tricladida				
Dugesia tigrina	0	0	0	0
Cura foremani	0	0	0	0
	0	0	0	0
OLOGOCHAETA	0	0	0	0
	0	0	0	0
Lumbriculidae	0	0	0	0
Stylodrilus heringianus	3040		0	100
	0	0	0	0
Tubificidae	0	0	0	0
Aulodrilus americanus	0	0	0	0
A. pluriseta	0	0	0	0
Ilyodrilus templetoni	0	0	0	0
Limnodrilus angustipennis	0	0	0	0
L. claperedianus	0	0	0	0
L. hoffmeisteri	0	0	0	20
L. udekemianus	0	0	0	0
L. profundicola	0	0	0	0
Potamothrix vejdovsky	0	0	0	0
Rhyacodrilus sp.	0	0	0	0
R. coccineus	0	0	0	0
R. montana	0	0	0	0
R. sodalis	0	0	0	0
Spirosperma ferox	0	0	0	0
Tasserkidrilus superiorensis	0	0	0	0
T. kessleri	0	0	0	0
Tubifex ignotus	0	0	0	0
T. tubifex	0	0	0	0
	0	0	0	0
With hair setae	0	0	0	0
Without hair setae	0	0	0	0
	0	0	0	0
Enchytraeidae sp.1	0	0	0	0
Enchytraeidae sp.2	0	0	0	0
	0	0	0	0
Naididae	0	0	0	0
			-	-

Stylaria lacustris

Erpobdella punctata

HIRUDINEA

Erpobdellidae

0

0 0 0

0

0

0

0

ABLE A3: ABUNDANCE DATA (1977/1978

(no. m )				
TATIONS:	k1	k2	13	14
	78	78	78	78
Nephelopsis obscurus	0	0	0	0
	0	0	0	0
Glossiphoniidae	0	0	0	0
Helobdella triserialus	0	0	0	0
	0	0	0	0
SOPODA	0	0	0	0
	0	0	0	0
Asellidae	0	0	0	0
Caecidotea racovitzai	0	0	0	0
Lirceus lineatus	0	0	0	0
	0	0	0	0
YSIDACEA	0	0	0	0
	0	0	0	0
Mysis relicta	0	0	0	0
	0	0	0	0
MPHIPODA	0	0	0	0
	0	0	0	0
Haustoriidae	0	0	0	0
Pontoporeia hoyi	140	120	0	140
	0	0	0	0
Gammaridae	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0
***	0	0	0	0
Crangonyctidae	0	0	0	0
Crangonyx gracilus	0	0	20	0
	0	0	0	0
Talitridae	0	0	0	0
Hyalella azteca	0	0	0	0
The grant of the state of the s	0	0	0	0
YDRACARINA	0	0	40	0
	0	0	0	0
ASTROPODA	0	0	0	0
	0	0	0	0
Valvatidae	0	0	0	0
Valvata sincera sincera	0	0	0	0
Valvata tricarinata	0	0	0	0
	0	0	0	0
Hydrobiidae	0	0	0	0
Amnicola limosa	0	0	0	0
	0	0	0	0
Lymnaeidae	0	0	0	0
Fossaria	0	0	40	0
Lymnaea	0	0	0	0
	0	0	0	0
Physidae	0	0	0	0
Physella	0	0	0	0
HT1				

TABLE A3: ABUNDANCE DATA (1977/1978

(no. m )			1.7	14
STATIONS:	k1	k2	13	78
	78	78	78 0	0
	0	0	0	0
Planorbidae	0	0	0	0
Gyraulus	0	0		0
Helisoma	0	0	20	0
	0	0	0	0
Sphaeriidae	0	0	0	20
Pisidium	120	20	0	0
P. amnicum	0	0	-	0
Sphaerium	0	0	0	0
	0	0	0	0
DIPTERA	0	0		0
	0	0	0	0
Chironomidae	0	0	0	0
	0	0	0	0
Tanypodinae	0	0	0	0
Ablabesmyia	0	0	0	0
Procladius	0	0	0	
Thienemannimyia	0	0	0	0
	0	0	0	_
Diamesinae	0	0	0	0
Pagastia sp. A	0	0	0	0
Potthastia	0	0	0	0
longimanus grp.	0	0	0	0
Protanypus sp. A	0	0	0	0
	0	0	0	0
Prodiamesinae	0	0	0	0
Monodiamesa tuberculata	20	0	0	0
Prodiamesa	0	0	0	0
	0	0	0	0
Orthocladiinae	0	0	0	0
	0	0	0	0
Brillia	. 0	0	0	0
Cricotopus (Isocladius)	0	0	0	0
Cricotopus sp.	0	0	0	0
Heterotrissocladius	0	0	0	0
marcidus grp.	0	0	0	0
subpilosus grp.	0	0	0	0
Hydrobaenus	0	0	0	0
pilipes grp.	0	0	0	0
Orthocladius	0	0	0	0
Paracladius	0	0	0	0
Parakieferiella	0	0	0	0
Psectrocladius	0	0	0	0
Mesopsectrocladius	0	0	0	0
- Synorthocladius	0	0	0	0
	0	0	0	0

ABLE A3: ABUNDANCE DATA (1977/1978 (no. m )

(no. m )				
TATIONS:	k1	k2	13	14
	78	78	78	78
Chironominae	0	0	0	0
	0	0	0	0
Chernovskiia orbicus	0	0	0	0
Chironomus	0	0	0	0
Cladotanytarsus	0	0	0	0
(mancus grp.)	0	0	0	0
Cryptochironomus fulvis	0	0	0	0
Cryptotendipes	0	0	0	0
Demicryptochironomus	0	0	20	0
Dicrotendipes	0	0	0	0
Einfeldia	0	0	0	0
Lipiniella	0	0	0	0
Microtendipes	0	0	0	0
pedellus grp.	0	0	0	0
Parachironomus	0	0	0	0
arcuata grp.	0	0	0	0
Paracladopelma	0	0	0	0
(nigritula grp.)	20	0	0	0
Paralauterborniella	0	0	0	0
Paratanytarsus	0	0	0	0
Paratendipes	0	0	0	0
Phaenopsectra	0	0	0	0
Polypedilum/Pedionomus	380	340	0	200
Stictochironomus	0	0	0	0
Tanytarsus	0	0	40	0
	0	0	0	0
hironomidae (pupae)	0	0	0	0
	0	0	0	0
eratopogonidae	0	0	0	0
	0	0	0	0
mpididae	0	0	0	0
	0	0	0	0
ICHOPTERA	0	0	0	0
	0	0	0	
eptoceridae	0	0	0	0
Mystacides sepulchralis	0	0	0	0
Oecetis sp.	0	0	0	0
	0	-	0	0
imnephilidae	0	0	0	0
	0	0	0	0
ONATA	-		0	
	0	0	0	0
ordulegastridae	0	0	0	0
Cordulegaster	0	0	0	0
eu.	0	0	0	0
SH.	U	U		v

TABLE A3: ABUNDANCE DATA (1977/1978

Cottidae

(no. m )				
STATIONS:	k1	k2	13	14
	78	78	78	78
	0	0	0	0
Gasterosteidae	0	0	0	0
Pungitius pungitius	0	0	0	0
rengrenes person			•	

0 0 0 0

Total Abundance	3720	2540	180	480
Total # Taxa	6	4	6	5
Diversity Index	0.99	0.9	2.5	1.9
Pielou's Evenness	0.38	0.45	0.97	0.82
Station Depth (m)	62.2	27.5	15.6	45.8

TABLE A4: ABUNDANCE DATA (1989) (no. m )

STATIONS:	a1	a3	a4	a6	ь1	b2	Ь4	b8	c1	c2	c3	c5	<b>c</b> 7	с9	ď2	d4	d6	d7	e2
TURBELLARIA																			
Tricladida																			
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S. heringianus	0	0	420	0	20	20	20	0	0	0	60	420	0	0	60	240	0	60	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	340	0	0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0	0
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	0
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	280	40	0	0	0	0	0
R. coccineus	0	0	0	0	0	0	60	80	0	0	0	0	0	0	0	0	0	0	0
R. montana	0	0	0	0	0	0	20	20	0	0	0	0	0	20	0	0	0	0	0
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirosperma ferox	0	0	280	0	0	0	20	0	0	0	0	0	0	0	0	0	40	0	0
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ĭ. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T. tubifex	0	0	0	0	0	0	0	40	0	0	0	0	180	40	0	0	0	20	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
With hair setae	0	0	0	0	0	0	120	20	0	20	80	0	0		-	0	120	160	70
Without hair setae	0	0	0	20	0	0	0	0	0	100	100	80	60	20	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.2	0	0	0	0		0	0	0		0	0	0	0	0	0		0	0	0
No. I d I done	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naididae		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1101011154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IIRUD I NEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E-pohdol Lidas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpoboetta punctata	0	-			W.				9					9	U	U	U		U

TABLE A4: ABUNDAN	E DATA	(1989)	(no.	m	)	
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						8 (42)				-	- 7		-7	-0	d2	d4	d6	d7	•2
STATIONS:	a1	a3	a4	а6	b1	b2	Ь4	b8	c1	c2 0	c3 0	c5 0	c7 0	c9 0	0	0	40	0	e2 0
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I SOPOO A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	20	0	0
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
WEIDAGEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	0	0	0	0	0	0	.0	0	0	0	0	0	0	0	0	0	0
mysis retreto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPH I PODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi	20	60	40	140	0	60	260	240	0	20	20	60	140	380	20	0	0	780	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	20	0	20	0	0	0	0	20	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ~
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae Valvata sincera sincera	0	0	60	0	0	0	40	0	0	0	0	0	0	0	0	0	280	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vatvata ti icai mate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Allertock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0			
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
- 76-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ABLE	A4:	ABUNDANCE	DATA	(1989)	(no.	m	)
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:TATIONS:	a1	а3	a4	a6	b1	b2	b4	b8	c1	c2	с3	c5	c7	с9	d2	d4	d6	d7	e2
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20	40	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .	0	0	0	0	0
Sphaerium	0	20	0	0	0	0	40	40	0	0	0	0	0	100	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	0	0	160	0	0	0	40	0	0	0	0	0	60	80	0	0	60	60	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	80	100	0	0	0	20	0	20	0	20	120	220	40	20	0	20	0	20	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	20	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 60	0	0
Paracladius	0	0	760	0	0	0	320	0	0	20	0	0	0	20	0		1000	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A4: ABUNDANCE DATA (1989) (no. m )

STATIONS:	a1	a3	a4	a6	b1	ь2 0	b4 0	ь8 0	c1 0	c2 0	c3 0	c5 0	c7 0	c9 0	d2 0	d4 0	d6 0	d7 0	e2 0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	20	0	0	0	0	0	200	0	0	0	0	0	520	140	0	0	0	260	20
Einfeldia		0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma		0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
(nigritula grp.)	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	20	0	80	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0
Phaenopsectra	0	0	80	0	0	40	0	0	0	40	0	60	0	0	0	0	80	40	0
Polypedilum/Pedionomus	0	0	0	0	0	40	40	0	0	140	20	60	0	80	0	0	140	40	0
Stictochironomus	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	140	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMEROPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nemeridae		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
enemera simulans	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0	0	0
LCHOPTERA	0	-	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0
	0			0	0	0	0	0			0	0		0	0	0	0	0	
otoceridae	0		0	0	0	0					0	0			0	0	0		
ystacides sepulchralis	0			0		0					0	0			0	0			
Oecetis sp.	0			0		0					0	0			0	0			
	0			0		0					0	0				0	C	0	0
mephilidae	0	0	0	0	n	n	0				0	0				0			0

BLE	A4:	ABUNDANCE	DATA	(1989)	(no.	m	)
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ATIONS:	a1	a3	а4	a6	b1	b2	Ь4	ь8	c1	c2	c3	c5	<b>c</b> 7	с9	d2	d4	d6	d7	e2
ONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
asterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
, .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

tal Abundance	200	220	2020	180	40	240	1180	460	0	420	420	920	1380	940	100	300	2540	1600	20
tal # Taxa	7	5	12	3	2	8	12	7	0	10	7	7	9	11	3	3	19	11	. 1
versity Index	2.52	1.97	2.73	0.99	1	2.86	2.94	2.13	0	2.81	2.49	2.21	2.6	2.75	1.37	0.91	3.13	2.46	0
elou's Evenness	0.89	0.85	0.76	0.62	1	0.95	0.82	0.76	0	0.85	0.89	0.79	0.82	0.79	0.87	0.57	0.74	0.71	0
ation Depth (m)	5.54	4.3	1.68	39.8	7.58	5.54	17	32.9	3	7.9	7.9	5.7	22	20.1	11.7	13.9	11.2	25.3	13

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	e4	e6	e8	e10	e12	e13	e15	f1a	f1b	f3	f5	f7	f9	f10	f13	f15	f17	f19	f21	
TURBELLARIA																				
Tricladida									^	0	0	0	0	0	0	0	0	0	0	
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0	0	0	0		0	20	20	220	960	520	40	0	0	20	
S. heringianus	520	380	460	780	20	160	0	0	20	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	40		0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. hoffmeisteri	0	0	40	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Potamothrix vejdovsky	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	-	
Rhyacodrilus sp.	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0		
R. coccineus	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		
R. montana	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0			0	0	0	0	0	0	0	0		0	0	
Spirosperma ferox	0	0	0	0	0	0	-		0	0	0	0	0	0	0	0		0	0	ĺ
Tasserkidrilus superiorensis	0	0	0	0	0	0		- 2		0	0	0	0	0	0	0		0		)
T. kessleri	0	0	0	0	0	0		- 3		0	0	0	0	0	0	0	-		-	
Tubifex ignotus	0	0	0	0	0	0			_	0	0	0	0	0	0	40				)~
T. tubifex	0	0	0	0	0	0				0	0	0	0	0	0	0				
	0	0	0	0	0	0				0	0	0	0	0	0	60				)
With hair setae	0	0	160	0	0	0				0	0	0	0	0	0	0				)
Without hair setae	0	0	0	0	0					0	0	0	0	0						
	0		0	0						0	0	0	0							
Enchytraeidae sp.1	0		0							0	0	0	0							
Enchytraeidae sp.2	0		0							0	0	0	0							0
	0		0							0	0	0	0							0
Naididae	0		0							0	0	0	0							0
Stylaria lacustris	0		0							0	0	. 0								0
	0		0							0		0								0
HIRUDINEA	0	-	0									0								0
	0		0									0					) (			0
Erpobdellidae	0											0								0
Erpobdella punctata	0	0	0	0	0		, (	, (	, 0	Ü	Ü					,				

TABLE A4: ABUNDANCE DATA (1989) (no

	-/	e6	e8	e10	e12	e13	e15	f1a	f1b	f3	f5	f7	f9	f10	f13	f 15	f17	f 19	f21
STATIONS:	e4 0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ar south and then	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triseriatis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	20	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eliceus Cineacos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	0	0	20	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0
14.4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi	140	320	1160	440	80	340	800	0	0	0	40	20	160	800		1100	0	20	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	20	0	0	0	0	20	0	0	0	0	20	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
************	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossaria	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	0	0	0	0	0	0	0	0	.0	0	0	0	0	0	0	0	0	0
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	e4	e6	e8	e10	e12	e13	e15	f1a	f1b	f3	f5	f7	f9	f10	f13	f15	f17	f19	f21	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ne: Isona	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PELLETPOON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pisidium sp.	0	0	20	0	0	0	0	0	. 0	0	0	0	0	20	0	0	0	0	0	
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaerium	0	0	120	0	0	0	0	0	0	0	0	0	20	80	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ablabesmyia	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	
Procladius	0	20	20	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	
Thienemannimyia	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pagastia sp. A	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
longimanus grp.	0	0	0	0	0	0	0	0	0		200			0	0	0	0	0	0	
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	(	0	. 0	0	0	0	0	0	
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Monodiamesa tuberculata	40	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus (Isocladius)	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Heterotrissocladius	0	0		0	0	40	0	20	0	0	20	0	0	0	0	0	0	0	0	
marcidus grp.	20	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pilipes grp.	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Psectrocladius	0	0	0	0	0	0	0	40	40	0	0	0	0	0	0	0	0	0		
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Synorthocladius	0	U	U	U	U	U	U	U	U	U	0			0	0	0		0		

ABLE A4: ABUNDANCE DATA (1989) (no

TATIONS:	e4	e6	e8	e10	e12	e13	e15	f1a	f1b	f3	f5	f7	f9	f10	f13	f15	f17	f19	f21	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomus	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Einfeldia	0	20	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(nigritula grp.)	40	40	0	20	0	20	0	0	0	0	0	0	0	20	0	0	0	0	0	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	. 0	
Phaenopsectra	0	0	20	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	
Polypedilum/Pedionomus	40	0	0	0	0	0	0	0	220	0	20	0	0	140	0	0	0	0	0	
Stictochironomus	20	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanytarsus	0	0	0	0	0	0	0	80	40	0	20	0	0	0	20	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
hironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
eratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
mpididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HEMEROPTERA				0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
phemeridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ephemera simulans			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
eptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
imnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
innepri ( ruae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Max.				~			~	-	-		-	-	-	-				V	9	

TARLE A4: ABUNDANCE	DATA	(1989)	(no
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STATIONS:	e4	e6	e8	e10	e12	e13	e15	fla	†1b	13	15	17	17	110	113	113	117	117	121
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	0	0	0
OUGNATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
a I I i dea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
~ • •	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	U	U					_												
	0/0	1000	20/0	1260	120	580	800	160	480	0	120	40	420	2160	900	1240	0	60	20
Total Abundance					-		1	4	10	0	5	2	4	10	3	4	0	2	1
Total # Taxa	8	10	10	4	3	5	- 1			-		-	1000			200	-		0
Diversity Index	1.87	2.43	1.91	1.15	1.25	1.57	0	1.75	2.67	0	2.25			1.98		0.68		0.92	
Pielou's Evenness	0.62	0.73	0.58	0.57	0.79	0.67	0	0.88	0.8	0	0.97	- 1	0.72			0.34		0.92	0
Station Depth (m)		18.7		31.7	40	40	86	6.8	10.4	9.6	15.8	17	21	29.1	31.5	37.5	25.1	25.1	25.9

ABLE A4: ABUNDANCE DATA (1989) (no

TATIONS:	f23	f25	g1	g3	g5	g7	g9	g11	g13	g15	g17	g19	g21	g23	g25	h2	h4	h6	h8	
URBELLARIA																				
Tricladida																				
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S. heringianus	40	80	60	80	0	40	200	1920	100	0	20	240	0	0	140	0	100	40	380	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	200	20	0	140	0	0	0	0	0	0	0	0	
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. montana	0	0	0	0	0	0	0	200	0	0	0	0	0	0	0	0	780	100	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	40	0	20	0	0	0	0	0	0	0	0	0	0	0	20	0	
Tasserkidrilus superiorensis	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**
T. tubifex	0	80	0	0	0	0	0	0	80	20	40	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
With hair setae	0	60	0	0	0	0	40	0	0	100	40	0	0	0	20	0	0	40	0	
Without hair setae	0	60	160	20	0	0	20	200	40	0	0	0	0	0	0	20	0	0	200	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stylaria lacustris	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	
IRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdella punctata	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	f23	f25	g1	g3	g5	g7	g9	g11	g13	g15	g17	g19	g21	g23	g25	h2	h4	h6	h8	
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	.0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
I SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
£	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	140	0	
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L ceus (meacus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
111010101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	20	20	0	0	0	0	0	20	0	0	0	0	20	20	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	
AMPH I PODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	0	0	0	0	180	1100	640	960	680	140	20	0	60	960	40	0	360	360	
Pontoporeia hoyi		1360	20	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammaridae	0	0	0	40	0	0	20	0	20	0	0	0	0	0	0	0	0	20	20	
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
rangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
crangonyx gracitos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	40	20	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	,
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvatidae	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	20	0	
Valvata sincera sincera	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Valvata tricarinata	0		0	0	0	0		0	-	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0		0		0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0		0	0	0	0		0		0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0		0			0	0	0	0	0	0	0	0	0	
Physella	0		0	0	0	0		0			0	0	0	0	0	0	0	0		
and the second s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	f23	f25	g1	g3	g5	g7	g9	g11	g13	g15	g17	g19	g21	g23	g25	h2	h4	h6	h8
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	0
Pisidium sp.	0	20	0	40	0	20	0	40	0	0	0	0	0	0	0	0	0	0	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0
Sphaerium	0	0	20	60	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
= "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	120	0	0	20	0	0	0	20	0	0	0	0	0	100	120	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
The second secon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	80	60	0	0	0	20	0	0	0	0	0	0	0	40	240	100	40
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
marcidus grp.	20	20	0	0	0	0	0	0	0	0	0	0	0	0	60	0	20	0	20
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0
Paracladius		. 0	0	0	0	0	0	0	0	٥	0	0	0	0	0	0	0	0	0
Parakieferiella	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synorthocladius	U							-				-		-	=	-		-	-

ABLE A4: ABUNDANCE DATA (1989) (no

TATIONS:	f23	f25	g1	g3	g5	g7	g9	g11	g13	g15	g17	g19	g21	g23	g25	h2 0	h4 0	h6 0	h8 0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	20	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	20	0	40	20	20	0	0	0	0	0	0	0	120	80	20	20
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	20	40	0	0	60	20	0	20	0	0	0	0	0	160	100	220	0
Polypedilum/Pedionomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus	0	0	60	20	0	0	0	0	0	0	20	0	0	0	0	0	0	20	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	100	0
Chironomidae (pupae)	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
atopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E-100-	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 -
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHEMEROPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHEMEROPIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeridae	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemera simulans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epitellet a Stillotoris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RICHOFIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
occerts op.	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E Introprit Class	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ARLE	A4:	ABUNDANCE	DATA	(1989)	(no
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TATIONS:	f23	f25	g1	g3	g5	g7	g9	g11	g13	g15	g17	g19	g21	g23	g25	h2	h4	h6	h8
DONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
positivity.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

otal Abundance	380	1720	580	600	0	300	1540	3260	1260	860	440	280	0	80	1220	420	1500	1400	1040
otal # Taxa	3	9	12	12	0	5	10	9	8	5	8	3	0	2	6	6	10	18	7
iversity Index	0.77	1.32	3.1	3.34	0	1.74	1.59	1.87	1.38	1.09	2.49	0.74	0	0.81	1.14	2.23	2.31	3.46	2.03
ielou's Evenness	0.49	0.42	0.87	0.93	0	0.75	0.48	0.59	0.46	0.47	0.83	0.46	0	0.81	0.44	0.86	0.7	0.83	0.72
itation Depth (m)	44	101	6	8.73	4.3	20.9	3.7	39	42.8	39.4	34.3		16.7	38	81	4.7	10.4	17.6	22.4

TABLE A4: ABUNDANCE DATA (1989) (no

TABLE A4: ABONDANCE DATA																			
CTATIONS.	h10	h11	h13	h15	h16	h18	h20	h22	i1	i3	i5	i7	i9	i10	112	i 14	i 16	i 17	i 19
STATIONS:																			
TURBELLARIA																			
TORDELE CONTROL OF THE PROPERTY OF THE PROPERT	•																		
Tricladida							_	_					0	0	0	0	0	0	0
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lumbriculidae	0	0	0	0	0	0	0	0	0	360	80	-	1000	40		1120	20	0	20
S. heringianus	240	760	100	140	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0
L. claparedianus	0	0	0	0	0	0	0	0	0	0	60	220	0	0	0	320	0	0	0
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	0	0	0
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamothrix vejdovsky	0	0	0	0	0			0	0	200	20	320	0	0	0	160	0	0	0
Rhyacodrilus sp.	0	0	380	0	0			20	0	0	0	0	0	0	0	0	0	0	0
R. coccineus	100		100	0	0			0	0	0	0	0	0	0	0	0	0	0	0
R. montana	40		0	0		_		0	0	0	0	0	0	0	0	0	0	0	0
R. sodalis	0		0	0				0	0	0	0	0	200	0	0	0	0	0	0
Spirosperma ferox	0		-	0				100	0	0	0	0	0	0	0	0	0	0	0
Tasserkidrilus superiorensis	0		-	0					0	0	0	0	0	0	0	0	0	0	0
T. kessleri	0			0			100		0	200	40	220	0	0	1000	160	0	0	0
Tubifex ignotus	40	-		0	-				0	0	0	0	0	0	0	0	0	0	0 _
T. tubifex	0			0	-			0	0	0	0	0	0	0	0	0	0	0	0
	40		-				0	0	0	0	60	0	0	0	0	0	20	0	0
With hair setae	40								0	0	40	100	0	0	0	160	0	0	0
Without hair setae	0								0	0	0	0	0	0	0	0	0	0	0
	0								0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.1	0								0	0	0	0	0	0	0	0	0	0	0
Enchytraeidae sp.2	0								0	0	0	0	0	0	0	0	0		0
	0						0	0	0	0	0	0	0	0		0	0		0
Naididae	0								0	0	0	0	0	0	C	0	0		0
Stylaria lacustris							0	0	0	0	0	0	0	0		0	0		0 0
WARREN THE A	Ċ						0	0	0	0	0	0	0	0		0	0	) (	0 0
HIRUDINEA	Č						0	0	0	0	0	0	0	0		0	0	) (	0
Sanahdal Lidae							0			0	0	0	0	0		0	0	) (	0 0
Erpobdellidae Erpobdella punctata					) (	0		0	0	0	0	0	0	0	. (	0 0		) (	0 0
Erpobuetta punctata																			

ABLE A4: ABUNDANCE DATA (1989) (no

TATIONS:	h10	h11	h13	h15	h16	h18	h20	h22	i1	13	15	i7	19	i10	112	114	i16	i 17	119	
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helobdella triserialis	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	20	0	0	0	0	0	0	0	0	0	1840	480	0	0	0	0	0	0	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
YSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T STORGER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	
11/3/13 / 12/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4PH1PODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
THE TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
laustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pontoporeia hoyi			1180	300	0	0	100	380	20	0	0	0	100	80	600	1580	60	0	420	
Politopol eta lloyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	20	100	0	0	0	0	0	0	0	0	
dammarus pseudot miliaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	20	160	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
nyatetta azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
/004C491V4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TORACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
167000004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ISTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		w
/alvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
The state of the s	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
lydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.ymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
'hysidae	0									-						-				
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	h10	h11	h13	h15	h16	h18	h20	h22	i 1	i3	i5	i7	i9	i 10	112	i 14	i 16	i 17	i 19	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TICK 130Hd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PELECIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pisidium sp.	0	0	0	0	0	0	0	0	0	0	0	160	0	0	0	0	0	0	0	
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaerium	0	0	0	0	0	0	0	0	0	20	40	20	0	0	0	0	0	0	0	
Sprider rom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIFIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Citti dildiii dae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Procladius	20	0	0	0	0	0	0	0	0	20	60	180	0	20	0	20	0	0	0	
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	
,,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Monodiamesa tuberculata	20	40	0	0	0	0	0	0	0	100	0	0	80	0	0	0	0	0	0	
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus sp.	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
marcidus grp.	20	0	0	40	0	0	0	0	0	0	0	0	80	0	0	20	0	0	40	
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	h10	h11	h13	h15	h16	h18	h20	h22	i1	i3	i5	i7	19	i 10	112	i14	i 16	i 17	i 19 0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	460	0	0	0	40	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	20	20	0	0	0	20	0	0	20	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	20	40	0	0	0	0	0	60	160	160	340	20	0	0	0	0	0	0
Polypedilum/Pedionomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus	20	20	0	80	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E-rations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EPHEMEROPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EPHENEROPIERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemera simulans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epiteliera Stillotoris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICING FERO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A4: ABUNDANCE DATA (1989) (no

CTATIONS -	h10	h11	h13	h15	h16	h18	h20	h22	i1	i3	15	17	19	i 10	112	114	116	i 17	i 19
STATIONS:	0	0	.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ctt-idan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								2.12						410	2020	77/0	120	20	480
Total Abundance	1340	2320	2260	600	0	0	120	460				2720	1500	140	2020	3760	120	- 20	3 .
Total # Taxa	15	8	8	4	0	0	2	5	3	10		13		4	4	11	. 70	1	
Diversity Index	2.55	1.56	2.14	1.66	0	0	0.7	1.01	1.37					1.38		2.31			0.69
Pielou's Evenness	0.65	0.52	0.71	0.83	0	0	0.7	0.44	0.87		0.52					0.67			0.42
Station Depth (m)	35.1	40.4	53	39.8	29.1	24.4	47	46	3.49	4.3		13	12.6	12.1	46.3	54.3	12.6	31.7	18.6

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HIRUDINEA

Erpobdellidae .

Erpobdella punctata

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	121	j1	j2	j4	j6	j8	j10	j12	k2	k4	k6	k8	k10	12	14	16	8.1	110	112	
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ISOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	260	40	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WELDTE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	20	20	0	20	
nysis reticts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
71.0 11.1 200.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pontoporeia hoyi	60	0	20	1320	760	0	1200	60	440	1700		0	1380	40	-		1620	1640	1300	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammarus pseudolimnaeus	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3 - 3 - 3 - 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	
Valvata tricarinata	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Vatvata ti itali iinto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-			
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	ĺ

ABLE A4: ABUNDANCE DATA (1989) (no

71000																				
TATIONS:	121	j1	j2	j4	j6	j8	j10	j12	k2	k4	k6	k8	k10	12	14	16	18	110	112	
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pisidium sp.	0	20	0	0	0	20	100	0	0	0	0	0	40	0	40	20	0	80	140	
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
IPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ablabesmyia	0	0	0	0	0	0	0	0		20	0	0	0	0	0	0	20	0	0	
Procladius	0	20	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Thienemannimyia	0	0	0	0	0	0	0	0	-		0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesinae	0		80	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	0	
Monodiamesa tuberculata	0	20 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Brillia	0		n	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Heterotrissocladius	0	0	0	0	0	0	40	0	0	20	0	0	0	0	0	0	20	0	0	
marcidus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pilipes grp. Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orthocladius Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paracladius Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parakieferiella Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Psectrocladius Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Synorthociadius					-															

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	i21 0	j 1 0	j2 0	j4 0	j6 0	j8 0	j10 0	j12 0	k2 0	k4 0	k6 0	k8 0	k10 0	12	14	16	8 J	l 10 0	l 12 0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CITT OTOITTIBE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0
Chironomus	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polypedilum/Pedionomus	0	200	0	0	0	20	0	0	0	0	0	0	0	0	20	0	0	0	0
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanytarsus	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	20	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ~
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EPHEMEROPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemera simulans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4 D . F	41.	ABUNDANCE	DATA	(1989)	(no
ARILE	84:	ABUNDANCE	PHIN	511011	

	121	11	j2	j4	j6	j8	j10	j12	k2	k4	k6	k8	k10	12	(4	16	18	110	112
TATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	-		0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISH	0	0	0	0	0		-	-	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	-		-		-	0	0	0	0	0	0
Gasterosteídae	0	0	0	0	0	0	0	0	0	0	0	0	0						
Pungitius pungitius	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
rungitus pangitus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90111000																			
									2292	75/0	2010		19/0	100	020	2680	7700	2260	1020

		40	2700	640	2520	2640	1460	1480	60	1880	3560	2960	0	1840	100	920	2680	3380	2260	1920
otal Abundance		4	10	11	8	4	8	7	- 1	3	6	6	0	9	4	7	5	7	6	4
otal # Taxa		n	2 44	3.04	2.17	0.87	1.91	1.36	0	0.87	1.56	2.2	0	1.18	1.92	1.6	1.17	1.58	1.16	1.22
iversity Index		n	0.73	0.88	0.72	0.43	0.64	0.49	0	0.55	0.6	0.85	0	0.37	0.96	0.56	0.5	0.56	0.45	0.61
ielou's Evenness tation Depth (m)	41	.4	0.85	1.2	53	65	65	11.6	17.4	6	66	75	60	86	5.2	42	64	76	84	83

TABLE A4: ABUNDANCE DATA (1989) (no

								_	-				- 2	-7	-/	-6	1	-2	n7
STATIONS:	m2	m4	m6	m8	m10	m12	n1	n2	n3	n4	n5	01	02	о3	04	05	p1	p2	р3
TURBELLARIA																			
Tricladida					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dugesia tigrina	0	0	0	0	0	0	0	0	40	0	0	0	0	20	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lumbriculidae	0	0	0		600	400	0	-	2160	-	840	0	0	60	420	220	0	0	60
S. heringianus	0	0		1320		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Tubificidae	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Aulodrilus americanus	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. claparedianus	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhyacodrilus sp.	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R. montana	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0
R. sodalis	0	0	0	0	0	0	0	0	_			0	0	0	0	0	0	0	0
Spirosperma ferox	0	0	0	0	0	0	ç	0	0	0	0	0	-	0	0	0	0	0	0
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tubifex ignotus	0	0	60	0	0	0	0	0	0	0	0	0	0		-		0	0	0
T. tubifex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0
With hair setae	0	0	0	0	0	0	0	0	0	120	0	0	-		0	0	0	0	0
Without hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HIRUDINEA	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DIE	A/	ABUNDANCE	DATA	(1989)	(no
THE P.	A4 .	ABUNUANCE	MALE TO STATE OF	4 1 2 2 2 2	3.

W.7.1000	m2	m4	m6	m8	m10	m12	n1	n2	n3	n4	n5	01	02	о3	04	05	p1	p2	р3
METIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nephetopsis obsedios	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ilossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
netobactta ti isolitati	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. 007.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ISIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0
Mysis relicta	0	20	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4PHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
laustoriidae	0	0	0	0	0	0	120				1120	60	60	-	1660	820	20	60	440
Pontoporeia hoyi	40	20		2040	1100	2120	0	0	0	0		0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	W	0	0	0	0	0	0	0	0
lammaridae	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Trangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyatetta azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IDRACARIRA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131101301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0		0	0				0	0	0	0	0	0	0	0
	0	0	0	0	0		0	0	0			0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0			0	0				0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0			0	0				0	0	0	0	0	0	0	0
	0	0	0	0			0	0				0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0			0	0				0	0	0	0	0	0	0	0
Fossaria	0	0	0	0			0	0				0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0			0	0				0	0	0		0	0	0	0
	0	0	0				0	0				0	0	0		0	0	0	
Physidae	0	0	0				0	0				0	0	0		0	0	0	
Physella	0	0	0				0	0				0	0	0		0	0	0	
	0	0	0	0	0	0	U	0	U		, 0	0	U	U	. 0	J	0		

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	m2	m4	m6	m8	m10	m12	n1	n2	n3	n4	n5	01	02	03	04	05	p1	p2	рЗ
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TEELSTI SON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	0	0	40	120	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sprider Fair	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E.I. J. E.NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 _
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mesopsectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1000
— Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LE A4: ABUNDANCE DATA (1989) (no

hironominae	n2 0	m4	m6	m8	m10	m12	n1	n2	n3	n4	n5	01	02	03	04	05	p1	p2	р3	
hironominae		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
nironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chernovskiia orbicus	0	0	0	0	0	0	20	20	0	0	0	40	20	0	0	0	160	0	0	
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .	0	0	0	
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	20	0	0	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	100	200	0	0	80	380	380	
Polypedilum/Pedionomus	0	20	0	0	0	0	380	0	0	0	0	0	0	0	0	0	0	0	0	
Stictochironomus	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
hironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
eratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
mpididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Q	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HEMEROPTERA	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
phemeridae	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	
Ephemera simulans	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	
and the second states.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
eptoceridae	-				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mystacides sepulchralis	0	0	0	0	U	U		-		-		-				-				
		0	0	0				0	0	0	0	0	0	0	0	0			0	
Mystacides sepulchralis	0				0	0	0	0						0			0	0	0	

TARIF A4: ABUNDANCE DA	TA (1989) (n	0
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Diversity Index

Pielou's Evenness

Station Depth (m)

STATIONS:	m2	m4	mб	m8	m10	m12	n1	n2	n3	n4	n5	01	02	03	04	05	p1	p2	p3	
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Abundance	40	80	1020	3500	1720	2640	520	140	3720	2500	1960	120	200	380	2100	1080	280	440	920	
Total # Taxa	1	4	4	4	3	4	3	3	3	3	2	3	4	5	4	3	4	2	4	
Diversity Index	0	2	1.42	1.19	1.02	0.9	1	1.15	0.49	1.22	0.99	1.5	1.7	1.83	0.8	0.95	1.52	0.58	1.49	

0 1 0.71 0.6 0.64 0.45 0.63 0.73 0.3 0.77 0.99 0.92 0.84 0.79 0.4 0.6 0.76 0.58 0.75

5.6 13.9 37.8 68 67 84 6.4 27.6 26 73 71 10.8 10.8 19.8 27.8 31.4 5.2 11.7 55

ILE A4: ABUNDANCE DATA (1989) (no

ITIONS:	p4	p5	р6	q1	q2	<b>q</b> 3	q4	<b>q</b> 5	q6	r1	r2	r3	r4	r5	г6	s1	s2	s3	s4	
RELLARIA																				
ricladida																				
)ugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremanii	.0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
570.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
umbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5. heringianus	620	80	160	0	0	500	180	840	80	0	0	20		1020		0	0	0	100	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	.0	0	0	0	0	0	
1. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
llyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.imnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
. hoffmeisteri	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<ol><li>coccineus</li></ol>	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
?. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
lasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
I. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
lubifex ignotus	0	80	0	0	0	0	0	180	0	0	0	0	0	0	0	0	0	0	0	
I. tubifex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
lith hair cotae	80	20	0	0	0	0	0	180	0	0	0	0	0	0	0	0	0	0	0	
Jith hair setae Jithout hair setae	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VICTOR Half Sector	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
nchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
nchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
icity of decided spire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
aididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
21700	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0		
rpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0		
Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	p4	p5	р6	q1	q2	q3	q4	q5	<b>q</b> 6	г1	г2	r3	г4	r5	r6	s1	s2	s3	s4
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0 20	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMPRIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pontoporeia hoyi		1180	960	0	0	1480	680	980	320	0	0	0	0	680	760	0	0	0	0
roncoporera noyr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***************************************	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W. doob ii doo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicota timosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A4: ABUNDANCE DATA (1989) (no

						_		-	-(	-1	-2	г3	г4	r5	г6	s1	s2	s3	s4
STATIONS:	p4	p5	p6	q1	q2	q3	q4 0	q5 0	φ6 0	r1 0	r2 0	0	0	0	0	0	0	0	0
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	190	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	40	40	0	0	0	0
Pisidium sp.	40	0	20	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	20	0	0	0	0	0	20	40	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	-	20	20	0	-	20	0	0	0	0	0	0	20	0	0	0	0	0
marcidus grp.	0		0	0			0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	-	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobaenus	0		0	0			0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0		0	0			0	0		0	0	0	0	0	0	0	0	0	0
Orthocladius	0	-	0	0		-	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0		0	0	-			0			0	0	0	0	0	0	0	0	0
Parakieferiella	0		0	0		- 5		0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	-	0	0				0		80	0	0	0	0	0	0	0	40	0
Mesopsectrocladius	0		0					0	0		0	0	0	0	0	0	0	0	0
Synorthocladius	0	9	-																

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	p4	p5	р6	q1	q2	q3	<b>q</b> 4	q5	q6	r1 0	r2 0	r3 0	г4 0	r5 0	г6 0	s1 0	s2 0	s3 0	s4 0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chernovskiia orbicus	0	0	0	40	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demicryptochironomus	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dicrotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Einfeldia	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
pedellus grp.	0	0	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parachironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paraclodopelma	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(nigritula grp.)	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Polypedilum/Pedionomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stictochironomus	0	0	0	0	0		20	0	0	0	0	0	0	0	0	0	0	0	0	
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
Empididae	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
EPHEMEROPTERA	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	
Ephemeridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ephemera simulans	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0		-			0		0	
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0			0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

ADI F	41.	ARUNDANCE	DATA	(1989)	(no
ARIE	A4 -	ARUNDANCE	UNIN	(11011	4.110

TATIONS.	p4	p5	рб	q1	q2	q3	94	<b>q</b> 5	q6	r1	r2	rs	F4	LO	го	SI	54	83	54	
TATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegastridae	0	-		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegaster	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0		-		0	0	0	0	0	0	0	0	0	0	0	
FISH	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	_		-	0	0	0	0	0	
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0			-		170	
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cottidae																				
							0/0	2220	400	100	40	20	100	1760	1860	0	20	40	100	
Total Abundance	1780	1440	1200	80	-	1980				100	40	1	1	4	3	0	1	1	1	
Total # Taxa	6	8	6	3	0	2	6	6	2			,				0	0	0	0	
Diversity Index		1.13		1.5				1.39			0	0	0	7		0	0	0	0	
Pielou's Evenness	0.57	0.38	0.37	0.95	0	0.82	0.49	0.54	0.56		0	0		0.59	0.7	U		_		
	80	86	87	5.2	9.6	65	87	96	86	5.5	13.5	23.2	28.4	100	106			17.9	31.9	
Station Depth (m)																				

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	u3	u4	u5	u6	v1	v2	v3	v4	v5	
TURBELLARIA																				
Tricladida																				
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cura foremanii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cora roremon.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DLOGOCHAETA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
productive transfer of the second	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S. heringianus	120	420	0	0	0	0	320	400	0	0	60	0	140	100	0	100	380	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubificidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. coccineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R. sodalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spirosperma ferox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
T. kessleri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tubifex ignotus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	¥
T. tubífex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
With hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Without hair setae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	80	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enchytraeidae sp.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stylaria lacustris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	
HIRUDINEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdellidae	0	0	.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Erpobdella punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

BRIF A4	ABUNDANCE	DATA (	1989)	(no
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TATIONS:	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	uЗ	u4	u5	u6	v1	v2	v3	V4	v5
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replietops 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hetobaetta tiriseriotis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOFODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caecidotea racovitzai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lirceus lineatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Linceus (ineacus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysis relicta	20	20	0	0	0	0	0	20	0	0	0	0	60	0	0	20	0	0	0
mysis reticta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(2010004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4PH1PODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	420	460	0	0	0	180	640	740	0	0	120	260	540	540	40	80	280	0	0
Pontoporeia hoyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sammaridae	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crangonyx gracilus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Political des	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORACARINA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0 ~
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U v v *****	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
~	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physidae	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physella		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	U	U	U		0	0									-	-	-	-

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	u3	υ4	u5	u6	v1	v2	v3	v4	v5
Planorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	60	0	0	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	0	60	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 _
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
marcidus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0
Hydrobaenus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pilipes grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paracladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parakieferiella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psectrocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesopsectrocladius	0	0	0	20	20	0	0	0	0	40	0	0	0	0	0	0	0	0	0
Synorthocladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syrioi tilocteores																			

ARLE	A4 .	ABUNDANCE	DATA	(1989)	(no
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YATTONIC.	s5	s6	t1	t2	t3	t4	t5	t6	u1	u2	u3	υ4	u5	u6	v1	v2	v3	v4	v5
TATIONS:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CITT OTOMETOR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomus	0	0	0	0	0	0	0	0	0	60	20	0	0	0	0	0	0	0	0
Cladotanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
Einfeldia	0	0	0	0	0	.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	80	280	0	0
(nigritula grp.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	40	0	0
Polypedilum/Pedionomus	0:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	60	0	0
Stictochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanytarsus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
at the second day of a second	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nidaa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0
Ceratopogonidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Empididae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHEMEROPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRENCHICA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemera simulans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epitelier 5 5 miles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0		0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE A4: ABUNDANCE I	DATA	(1989)	(no
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STATIONS:	s5	56	t1	t2	13	14	(3	10	uı	uz	u	U4	u	00	* 1	12	*2	**	*2
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasterosteidae		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pungitius pungitius	. 0	-	-	-		0	0	0	0	0		0	0	0	0	0	0	0	0
	0	0	0	0	0				-		_		0	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	U	U	U	U	U	U	·
Total Abundance	560	900	0	20	60	200	960	1160	40	120	320	280	780	640	300	480	1120	0	0
Total # Taxa	3	3	0	1	3	2	2	3	2	3	5	2	4	2	7	9	7	0	0
Diversity Index	0.96	0.13	0	0	1.59	0.47	0.92	1.04	1	1.46	2	0.37	1.32	0.63	2.47	2.76	2.32	0	0
	0.61		0	0	1	0.47	0.92	0.66	1	0.92	0.87	0.37	0.66	0.63	0.88	0.92	0.83	0	0
Pielou's Evenness		98			14.3		84		10.8	22.4	33.2	39	72	88	3.2	9.6	15.1	9	26.5
Station Depth (m)	65	30		12.1	14.5	24	-					-	-						

Erpobdella punctata

ABLE A4: ABUNDANCE DATA (1909) (10																				
TATIONS:	v6	v7	v8	<b>v</b> 9	y10	v11	bb1	bb3	bb5	bb7	bb9	cc2	cc4	dd1	dd3	ee2	ff3	gg1	995	í
URBELLARIA																				
Tricladida												•	•	0	0	0	0	0		0
Dugesia tigrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Cura foremanii	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
LOGOCHAETA	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0		0
	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		0
Lumbriculidae	0	0	0	0	0	0	0	0	0	0	120	260	80	0	560	0	0	0		0
S. heringianus	0	560	0	560	240	580	0	840	460	240	0	200	0	0	0	0	0	0		0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Tubificidae	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		0
Aulodrilus americanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
A. pluriseta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Ilyodrilus templetoni	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Limnodrilus angustipennis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
L. claparedianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
L. hoffmeisteri	0	0	0	0	0	0	0	0	0	0	0	-		0	0	0	0	0		0
L. profundicola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
L. udekemianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Potamothrix vejdovsky	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Rhyacodrilus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
R. coccineus	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0			0
R. montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0
R. sodalis	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0		0	-		
Spirosperma ferox	0	0	0	0	0	0	0		0	0	0	0		0		_	0			0
Tasserkidrilus superiorensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0			0
T. kessleri	0	0	0	0	0	0	0			0	0	0	0	0			0			0
Tubifex ignotus	0	0	0	0	0	0	0			0	0	0	0	0			0			0
T, tubifex	0	0	0	0	0	0	0			0	0	0	0	0			0			0
	0	0	0	0	0	0	0				0	0	-	-						0
With hair setae	0	0	0	0	0						0		-				~			0
Without hair setae	0	0	0	0	0							0								0
	0	0	0	0																0
Enchytraeidae sp.1	0		0	0																0
Enchytraeidae sp.2	0		0	0																0
	0	0	0	0																0
Naididae	0	0	0	0								-								0
Stylaria lacustris	0		0	0								-								0
	0		0																	0
HIRUDINEA	0		0																	0
	0		0																)	0
Erpobdellidae	0	0	0	0	0	0		0	0	0	0	0	0	0	) 0		, ,	, (	1	0
	-	-	- 0			n									4 17	4 17			a constant	10

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	v6	v7	v8	v9	v10	v11	bb1	bb3	bb5	bb7	bb9	cc2	cc4	dd1	dd3	ee2	ff3	gg1	gg5	
Nephelopsis obscurus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Helobdella triserialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1SOPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caecidotea racovitzai	0	320	0	0	0	0	0	0	0	0	20	0	0	0	40	0	0	0	20	
Lirceus lineatus	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MYSIDACEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mysis relicta	0	0	0	0	60	20	0	0	0	0	20	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AMPHIPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haustoriidae	0	0	0	0	0	720	0	1/0	0	720	0	0	0 80	0	140	0	0	0	0	
Pontoporeia hoyi	0	0	0	0	480	380	0	140	980 0	320	220	240	0	0	0	0	0	0	60	
-constant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gammaridae Gammarus pseudolimnaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	
Gammarus pseudot timaeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyctidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crangonyx gracilus	0	140	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Talitridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HYDRACARINA	0.	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GASTROPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
Mint and Edward	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvatidae Valvata sincera sincera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Valvata tricarinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydrobiidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amnicola limosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lymnaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fossaria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	
Lymnaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Physella	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	
=	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

BLE A4: ABUNDANCE DATA (1989) (no

ATIONS:	v6	v7	v8	v9	v10	v11	bb1	bb3	bb5	bb7	bb9	cc2	cc4	dd1	dd3	ee2	ff3	gg1	gg5
lanorbidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gyraulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helisoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116.5.1.001100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LECYPODA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
phaeriidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pisidium sp.	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
Pisidium amnicum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium	0	0	0	0	0	0	0	40	20	0	20	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hironomidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0	0	20	60	0	20	0	0	0	0	0	0	0	20
Procladius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thienemannimyia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
longimanus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protanypus sp. A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monodiamesa tuberculata	0	0	0	0	0	0	20	0	20	0	20	20	0	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
***	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 ~
Brillia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cricotopus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterotrissocladius	0	0	0	0	0		0	0	0		0	0	0	0	0 40	0	-	180	0
marcidus grp.	0	0	0	0	0			0			20	20	0	0				0	0
subpilosus grp.	0	0	0	0	0			0			0	0	0	0				0	0
Hydrobaenus	0	0	0	0	0			0	-		0	0	0	0				0	0
pilipes grp.	0	0	0	0	0			0			0		0	0					0
Orthocladius	0	0	0	0	0									0					
Paracladius	0	0	0	0	0					_				0					
Parakieferiella	0	0	0	0	0							-		0					
Psectrocladius	0	0	0	0	0			-						0					
Mesopsectrocladius	0	0	0	- 0	0			-						0			-		
Synorthocladius	.0.	U	U	U	0														

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	v6	v7	v8	v9 0	v10 0	v11	bb1 0	bb3 0	bb5 0	ьь7 0	ьь9 0	cc2 0	cc4 0	dd1 0	dd3 0	ee2	ff3 0	gg1 0	995 0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironominae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chernovskiia orbicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomus	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cladotanytarsus	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	180	
(mancus grp.)	0	0	0		0	0	20	0	0	0	0	0	0	0	0	0	0	0	20	
Cryptochironomus fulvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cryptotendipes	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demicryptochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dicrotendipes	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	
Einfeldia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lipiniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Microtendipes	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	0	0	0	0	
pedellus grp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Parachironomus	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
arcuata grp.	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paraclodopelma	0	0	0	0	0	0	20	20	20	40	0	40	0	0	0	0	0	0	0	
(nigritula grp.)	0	20	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	
Paralauterborniella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratanytarsus	0	0	0	0	-		0	0	0	0	0	0	0	0	0	0	0	0	0	
Paratendipes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phaenopsectra	0	0	0	0	0		20	40	40	0	0	0	0	0	60	0	0	0	20	
Polypedilum/Pedionomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stictochironomus	0	0	0	0	0	0	0	40	40	0	0	0	0	0	0	0	0	0	160	
Tanytarsus	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chironomidae (pupae)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	60	
Ceratopogonidae	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0		-2	0			0	0	0	-	0	0	20		
Empididae	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EPHEMEROPTERA	0	0	0	0	0	0	0	0	-	0	-		-	-	_	-			-	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ephemeridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ephemera simulans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRICHOPTERA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mystacides sepulchralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Limnephilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TARLE	44 -	ABUNDANCE	DATA	(1989)	(no

STATIONS:	v6	v7	v8	v9	v10	v11	bb1	bb3	bb5	bb7	bb9	cc2	cc4	dd1	ರಚಿ	ee2	ff3	gg1	<b>g</b> g5	
ODONATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cordulegastridae	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	
Cordulegaster	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gasterosteidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pungitius pungitius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
rangicias pangicias	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cottidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cottidae																				
Total Abundance	0	1100	0	620	780	980	100	1240	1800	600	460	580	160	0	900	0	0	340	1140	
Total # Taxa	0	6	0	3	3	3	5	9	12	3	8	5	4	0	8	0	0	7	12	
Diversity Index	0	1.78	0	0.55	1.24	1.13	2.3	1.9	2	1.27	2.2	1.65	1	0	1.9	0	0	2.18	2.67	
Pielou's Evenness		0.69	- 125	0.25		0.71	1	0.6	0.57	0.8	0.73	0.71	0.5	0	0.62	0			0.75	
Station Depth (m)	25			25.3	82	91					26.9	21.3	11.7	15.9	17.6	9.6	14.3	1	1	
station bepth (m)	Size of	20.00				× *				SHOW THE REAL PROPERTY.										

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	i6*	i 13*	i18*	f14*	d3*	b5*
JRBELLARIA						
Tricladida						0
Dugesia tigrina	0	0	0	0	0	0
Cura foremanii	0	0	0	0	0	0
	0	0	0	0	0	0
OLOGOCHAETA	0	0	0	0	0	0
	0	0	0	0	0	0
Lumbriculidae	0	0	0	50	480	700
S. heringianus		11400	60	320		0
	0	0	0	0	0	0
Tubificidae	0	0	0	7	. 0	0
Aulodrilus americanus	0	0	0	0	0	0
A. pluriseta	0	0	0	0	0	0
Ilyodrilus templetoni	0	0	0	0	0	0
Limnodrilus angustipennis	0	0	0	0	0	0
L. claparedianus	60	20 60	0	0	0	680
L. hoffmeisteri	00	0	0	0	0	180
L. profundicola	0	0	0	0	0	0
L. udekemianus	0	0	0	0	0	0
Potamothrix vejdovsky		0	0	0	0	0
Rhyacodrilus sp.	60	0	0	160	0	0
R. coccineus	- 0	0	0	0	0	0
R. montana	0	-	0	0	0	0
R. sodalis	0	0	0	0	0	0
Spirosperma ferox	0	0	0	0	0	0
Tasserkidrilus superiorensis	0	0	0	0	0	0
T. kessleri	0	0	0	0	0	0
Tubifex ignotus	0	80 80	0	80	0	0
T. tubifex	60	0	0	0	0	0
	0	120	0	560	0	520
With hair setae	0	260		0	0	0.000
Without hair setae	0			0	0	0
	0	0	0	0	0	0
Enchytraeidae sp.1	0				0	0
Enchytraeidae sp.2	0	0	0	0		
	0	0	0	0	0	0
Naididae	0	0	0	0	0	0
Stylaria lacustris	0	0	0	0	0	0
	0	0	0	0	0	0
HIRUDINEA	0	0	0	0	0	0
	0	0	0	0	0	0
Erpobdellidae	0	0	0	0	0	0
Erpobdella punctata	0	0	U	U	U	Ü

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	16*	i 13*	i18*	f14*	d3*	b5*
Nephelopsis obscurus	0	0	0	0	0	0
nophic topo to	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0
Helobdella triserialis	0	0	0	0	0	0
netsuserio di località di la constanti di la c	0	0	0	0	0	0
I SOPODA	0	0	0	0	0	0
1301001	0	0	0	0	0	0
Asellidae	0	0	0	0	0	0
Caecidotea racovitzai	3140	0	0	0	0	80
Lirceus lineatus	0	0	0	0	0	0
circeds (incures	0	0	0	0	0	0
MYSIDACEA	0	0	.0	0	0	0
ni si proce	0	0	0	0	0	0
Mysis relicta	0	20	0	40	0	0
11/3/3 / 61/610	0	0	0	0	0	0
AMPHIPODA	0	0	0	0	0	0
Anentroon	0	0	0	0	0	0
Haustoriidae	0	0	0	0	0	0
Pontoporeia hoyi	80	8140	340	5580	340	540
, sitte per a training	0	0	0	0	0	0
Gammaridae	0	0	0	0	0	0
Gammarus pseudolimnaeus	220	40	0	0	0	0
***************************************	0	0	0	0	0	0
Crangonyctidae	0	0	0	0	0	0
Crangonyx gracilus	200	0	0	0	0	0
	0	0	0	0	0	0
Talitridae	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0
**	0	0	0	0	0	0
HYDRACARINA	0	0	0	0	0	0
	0	0	0	0	0	0
GASTROPODA	0	0	0	0	0	0
	0	0	0	0	0	0
Valvatidae	0	0	0	0	0	0
Valvata sincera sincera	40	40	0	0	0	60
Valvata tricarinata	20	0	0	0	0	0
	0	0	0	0	0	0
Hydrobiidae	0	0	0	0	0	0
Amnicola limosa	0	0	0	0	0	0
	0	0	0	0	0	0
Lymnaeidae	0	0	0	0	0	0
Fossaria	0	0	0	0	0	0
Lymnaea	0	0	0	0	0	0
	0	0	0	0	0	0
Physidae	0	0	0	0	0	0
Physella	0	0	0	0	0	0
	0	0	0	0	0	0

TABLE A4: ABUNDANCE DATA (1989) (no

STATIONS:	i6*	i 13*	i 18*	f14*	d3*	b5*
Planorbidae	0	0	0	0	0	0
Gyraulus	20	0	0	0	0	0
Helisoma	0	0	0	0	0	0
	0	0	0	0	0	0
PELECYPODA	0	0	0	0	0	0
	0	0	0	0	0	0
Sphaeriidae	0	0	0	0	0	0
Pisidium sp.	400	0	20	40	0	60
Pisidium amnicum	0	0	0	0	0	0
Sphaerium	0	0	0	20	0	80
	0	0	0	0	0	0
DIPTERA	0	0	0	0	0	0
	0	0	0	0	0	0
Chironomidae	0	0	0	0	0	0
	0	0	0	0	0	0
Tanypodinae	0	0	0	0	0	0
Ablabesmyia	0	0	0	0	0	0
Procladius	540	20	0	60	20	220
Thienemannimyia	0	0	0	0	0	0
	0	0	0	0	0	0
Diamesinae	0	0	0	0	0	0
Pagastia sp. A	0	0	0	0	0	0
Potthastia	0	0	0	0	0	0
longimanus grp.	20	0	0	0	0	0
Protanypus sp. A	0	0	0	60	0	0
	0	0	0	0	0	0
	0	0	0	0	0	0
Prodiamesinae	0	0	0	0	80	40
Monodiamesa tuberculata	0	0	0	0	0	0
Prodiamesa	0	0	0	0	0	0
	0	0	0	0	0	0
Orthocladiinae	0	0	0	0	0	0
0.25148	0	0	0	0	0	0
Brillia	0	0	0	0	0	0
Cricotopus (Isocladius)	0	0			0	0
Cricotopus sp.	0	0	0	0	0	0
Heterotrissocladius	0	20	0		0	0
marcidus grp.	0	0	0	0	0	0
subpilosus grp.	0	0	0	0	0	0
Hydrobaenus	0	0	0		0	0
pilipes grp.	0	0	0		0	0
Orthocladius	140	0	0		0	820
Paracladius Parakieferiella	0	0			0	0
	0	0		7	0	0
Psectrocladius	0	0	0		80	0
Mesopsectrocladius	0	0	0		0	0
Synorthocladius	0	U	0			

BLE A4: ABUNDANCE DATA (1989) (no

ATIONS:	16*	i 13*	i18*	f14*	d3*	b5*
	0	0	0	0	0	0
Chironominae	0	0	0	0	0	0
	0	0	0	0	0	0
Chernovskiia orbicus	0	0	0	0	20	0
Chironomus	240	80	20	0	0	320
Cladotanytarsus	0	0	0	0	0	0
(mancus grp.)	0	0	0	0	0	0
Cryptochironomus fulvis	0	0	0	0	0	0
Cryptotendipes	0	0	0	0	0	0
Demicryptochironomus	0	0	0	0	0	0
Dicrotendipes	0	0	0	0	0	0
Einfeldia	20	20	0	0	0	1540
Lipiniella	0	0	0	0	0	0
Microtendipes	0	0	0	0	0	0
pedellus grp.	0	0	0	0	0	0
Parachironomus	0	0	0	0	0	0
arcuata grp.	0	0	0	0	0	0
Paraclodopelma	0	0	0	0	0	0
(nigritula grp.)	20	0	0	0	120	40
Paralauterborniella	0	0	0	0	0	0
Paratanytarsus	0	0	0	0	0	0
Paratendipes	0	0	0	0	0	0
Phaenopsectra	0	0	0	0	0	60
Polypedilum/Pedionomus	1080	40	0	20	20	360
Stictochironomus	0	20	0	40	0	0
Tanytarsus	0	120	0	100	0	20
	0	0	0	0	0	200
hironomidae (pupae)	0	0	0	0	0	0
	0	0	0	0	0	0
eratopogonidae	0	0	0	0	0	0
	0	0	0	0	0	0
mpididae	0	0	0	0	0	0
	0	0	0	0	0	0
	0	0	0	0	0	0
HEMEROPTERA	0	0	0	0	0	0
	0	0	0	0	0	0
phemeridae Ephemera simulans	0	0	0	0	0	0
Epnemera Simotans	0	0	0	0	0	0
ICHOPTERA	0	0	0	0	0	0
TONOT TENA	0	0	0	0	0	0
eptoceridae	0	0	0	0	0	0
Mystacides sepulchralis	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0
	0	0	0	0	0	0
imnephilidae	0	0	0	0	0	0
e e e e e e e e e e e e e e e e e e e	0	0	0	0	0	0
THE STATE OF THE S						

ABLE A4: ABUNDANCE DATA (1989) (no

TATIONS:	i6*	i13*	i18*	f14*	d3*	b5*
KONATA	0	0	0	0	0	0
Note: The second	0	0	0	0	0	0
Cordulegastridae	0	0	0	0	0	0
Cordulegaster	0	0	. 0	0	0	0
60, 66, 65, 65	0	0	0	0	0	0
ISH	0	0	0	0	0	0
	0	0	0	0	0	0
Gasterosteidae	0	0	0	0	0	0
Pungitius pungitius	0	0	0	0	0	0
, and the parties of	0	0	0	0	0	0
Cottidae	0	0	0	0	0	0

otal Abundance	6720	20580	440	7100	1160	6700
otal # Taxa	19	16	9	14	8	20
liversity Index	2.73	1.38	1.09	1.36	2.2	3.56
ielou's Evenness	0.64	0.345	0.34	0.36	0.74	0.82
itation Depth (m)	11.7		39.8	36.7	15.9	30.2

APPENDIX B

TROPHIC INDEX VALUES

Table B1. Trophic index values for all stations between 1969 and 1989 (note that station numbers differ in 1969 and 1976 from those in 1977/78 and 1989).

Station	1969	1976	Station	1977/78	1989
A1	0	0	A1	0	0
A2	0.13	-	A2	0	
A3	0		A3	0	0
A4	0.81		A4	0	0.28
A5	0.13		A6		0
	0.13		B1	0.06	0
16	0.13		B2	0	0
.7	0.13		B3	1.5	
31	0.81		B4	0	0.09
12	0.81		B5	0.6	
3			B6	0.19	
4	0		B8	4.55	0.26
5	0 13		C1	0	0
6	0.13 0.75		C2	0	0
17			C3	Ō	0.06
21	0.75		C4	0	0.00
2	0.46		C5	0.13	0.13
23	0.25		C6	0.06	0.10
24	0.13		C7	0.19	0.66
25	0		C8	0.59	0.00
26	1.43		C9	0.69	0
)1	2.25		D1	0	
)2	0		D2	0	0
)3	0		D3	0	
)4	0.13		D4	0.06	0.06
)5	0.25		D5	0.13	0.00
06	0			0.19	0.5
1	1.1	0	D6	0.19	0.24
2	0.54	1.5	D7		0.24
.3	0	0	D8	0.19	
4	0.25	0.25	E1	0	0
.5	1.87	0.54	E2		0
6	0.13	0.25	E3	0.06	0.13
-1	1.3	2.17	E4	0.06	0.13
2	1.5	0.75	E5	0.13	0.00
-3	0.3	0.75	E6	0.06	0.06
51	1.71	0.13	E7	0.06	0.24
52	3	0	E8	0.13	0.24
33	0.45	0.13	E10	0.13	0.13
54	0.65	0	E12		0
55	0.25	0.38	E13		0.06
36	3	1.81	E15		0
H1	0.38	0.25	F1	0	0
12	3	0.25	F2	0	
H3	0.38	0.25	F3	0.58	0
1	1.58	0.25	F4	, 0	

Table B3 (con't)

Station	1969	1976	Station	1977/78	1989
I2	0.33	0.25	F5	0.12	0
I3	0.25	0.23	F6	0.19	
J1	1.3		F7	0.13	0
J2	2.25		F9	0.06	
K1	0.13		F10		0.13
K2	0		F13		0.13
L1	0		F15		0.41
L2	0.33		F17		0
L3	0		F19		0
M1	0.54	0.33	F21		0
М2	0.8	0.64	F23		0
М3		0.38	F25		0.37
N1	0.44	0.25	GI		0
N2	1.5	0.71	G3	0	0
N3	0.63	0.46	G4	0	
01	0.63	0.21	G5	0.06	0
02	0.48	0.48	G6	0.19	
03	0.75	1.08	G7	0.23	0
21	0.84	0.25	G8	0.39	
2	0.38	0.25	G9	0.21	0.06
23		0.25	G10	0.18	
Q1	0.25		G11	0.37	0.19
Q2	0.38		G12	0.06	
Q3	0.52		G13	0.13	0.34
24	1.33		G15		0
Q5	0		G17		0.2
Q6	0.47		G19		0.06
R1 .	0	0	G21		0
22	0	0	G23		0
3	0	0	G25		0.06
24	0.38	0.13	H2		0
2.5	0.38	0.25	H3	0	
36	0.38		H4	0.13	0.13
51	0	0	H5	0.33	
32	0	0	H6	0.19	0.09
33	0.54	0	H7	0.43	
4	1.71		H8	0.19	0.06
5	0.38		H9	0.19	
66	0.54		H10	0.26	0.26
71	0	0	H11		0.13
Γ2	0	0	H13		0.45
T3	0.54	0	H15		0.06
Γ4	0		H16		0
T5	0.25		H18		0
Γ6	0.21		H20		0
J1	0	0	H22		0

Table B3 (con't)

Station	1969	1976	Station	1977/78	1989
****	0	0	I1		0
U2	0	0	13	0.41	0.22
U3	0	0	I4	3	
U4	0	0.25	15	0.26	0.31
U5	0	0.20	16	0	
U6	0	0	17	0.23	0.73
V1	0	0	18	0.14	
V2 V3	0	0	19	0.19	0.28
V 3 V 4	0	0	110	0.35	0
V4 V5	0.13	0	I11	0.47	
V6	0.15	0	I12	0	0
V0 V7	0	0	I14		0.58
	0	0	I16		0
V8 V9	0	0	117		0
	0	0	119		0
V10	0	0	I21		0
V11	0	Ü	J1	0.75	2.25
W1	0		J2		0.75
W2	0		J4		0.81
W3	0		J6		0.19
W4			18		0.17
			J10		0.16
		•	J12		0
			K1	0.19	
			K2	0.19	0.19
			K4		0.41
			K6		0.75
			K8		0
			K10		0.68
			L2		0.68
			L3	0	
			L4	0	0.28
			L6		0.19
			L8		0.40
			L10		0.13
			L12		0.13
			M2		0
			M4		0
			M6		0.16
			M8		0.13
			M10		0.13
			M12		0.13
			N1		0
			N2		0
			N3		0.19
			N4		0.19

Table B3 (con't)

Station	1969	1976	Station	1977/78	1989
			N5		0.13
			01		0
	***		O2		0
			O3		0
			04		0.13
			O5		0.06
			P1		0
			P2		0
			P3		0
			P4		0.13
			P5		0.44
			P6		0.06
			Q1		0
			Q2		0
			Q3		0.13
			Q4		0.06
			Q5		0.55
			Q6		0
			R1		0
			R2		0
*			R3		0
			R4		0
			R5		0.13
			R6		0.13
			S1		0
			S2		0
			S3		0
			S4		0
			S5		0
			S6		0.13
			T1		0
			T2		0
			T3		0
			T4		0
			T5		0.13
			T6		0.13
			U1		0
			U2		0
			U3		0
			U4		0
			U5		0
			U6		0
			V1		0
			V2		0
			V3		0.06
			V4		0

Table B3 (con't)

Station	1969	1976	Station	1977/78	1989
			V5		0
			V6		0
			V7		0.13
			V8		0
			V9		0.13
			V10		0.13
			V11		0.13

\*9693600006231\*